

**CASE**

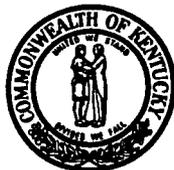
**NUMBER:**

99.404

INDEX FOR CASE: 99-404  
ESTILL COUNTY WATER DISTRICT #1  
Construct, Finance, Rates; 278.023

IN THE MATTER OF THE APPLICATION OF ESTILL COUNTY WATER  
DISTRICT NO. 1 OF ESTILL COUNTY, KENTUCKY, FOR A CERTIFICATE  
OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT, FINANCE  
AND INCREASE REATES PURSUANT TO KRS 278.023

SEQ NBR	ENTRY DATE	REMARKS
0001	09/22/99	Application.
0002	10/01/99	Acknowledgement letter.
0003	10/22/99	Final Order granting certificate, financing, tariff due 11/22/99.



COMMONWEALTH OF KENTUCKY  
**PUBLIC SERVICE COMMISSION**

730 SCHENKEL LANE  
POST OFFICE BOX 615  
FRANKFORT, KY. 40602  
(502) 564-3940

CERTIFICATE OF SERVICE

RE: Case No. 99-404  
ESTILL COUNTY WATER DISTRICT #1

I, Stephanie Bell, Secretary of the Public Service Commission, hereby certify that the enclosed attested copy of the Commission's Order in the above case was served upon the following by U.S. Mail on October 22, 1999.

See attached parties of record.

*Stephanie J. Bell*

Secretary of the Commission

SB/sh  
Enclosure

Mr. Thomas G. Fern  
State Director  
Rural Development  
771 Corporate Drive, Suite 200  
Lexington, KY. 40503 5477

Mr. Thomas H. Coffey,  
Rural Development  
95 South Laurel Road, Suite A  
London, KY. 40744

Ms. Pam Cox  
Office Manager  
Estill County Water District No. 1  
76 Cedar Grove Road  
Irvine, KY. 40336

Mr. Don Sexton  
PEH Engineers, Inc.  
1525 Bull Lea Road, Suite 100  
Lexington, KY. 40511

Honorable Garrett T. Fowles  
Attorney at Law  
114 North Thirst Street  
Richmond, KY. 40475

Honorable W. Randall Jones  
Attorney at Law  
Rubin & Hays  
First Trust Centre  
200 South Fifth Street  
Louisville, KY. 40202

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF ESTILL COUNTY WATER )  
DISTRICT NO. 1 OF ESTILL COUNTY, KENTUCKY, )  
FOR A CERTIFICATE OF PUBLIC CONVENIENCE )  
AND NECESSITY TO CONSTRUCT, FINANCE AND ) CASE NO. 99-404  
INCREASE RATES PURSUANT TO KRS 278.023 )  
)

O R D E R

On September 22, 1999, Estill County Water District No. 1 ("Estill District No. 1") submitted an application for a Certificate of Public Convenience and Necessity to construct a \$3,398,800 waterworks improvement project, for approval of its plan of financing for this project, and for adjustments to its water service rates. This project will provide new service to 284 additional customers. Project funding is a \$975,000 bond issue to be purchased pursuant to an agreement with the U. S. Department of Agriculture's Rural Development ("RD"), a \$900,000 grant from the RD, a \$985,000 Community Development Block Grant ("CDBG"), a \$450,000 Appalachian Regional Commission ("ARC") grant, and an \$88,800 contribution from the Applicant.

Estill District No. 1's application was made pursuant to KRS 278.023, which requires the Commission to accept agreements between water utilities and the U. S. Department of Agriculture or the U. S. Department of Housing and Urban Development and to issue the necessary orders to implement the terms of such agreements within 30 days of

satisfactory completion of the minimum filing requirements. Given that minimum filing requirements were met in this case on September 22, 1999, KRS 278.023 does not grant the Commission any discretionary authority to modify or reject any portion of this agreement.

IT IS THEREFORE ORDERED that:

1. Estill District No. 1 is hereby granted a Certificate of Public Convenience and Necessity for the proposed construction project.
2. Estill District No. 1's proposed plan of financing with RD is accepted.
3. Estill District No. 1 is authorized to issue bonds not to exceed \$975,000.
4. Estill District No. 1 shall file a copy of the "as-built" drawings and a certified statement that the construction has been satisfactorily completed in accordance with the contract plans and specifications within 60 days of the substantial completion of the construction certificated herein.
5. The rates set out in Appendix A, which is attached hereto and incorporated herein, are the rates approved for service rendered on and after the date of this Order.
6. Estill District No. 1 shall submit its revised tariff setting out the rates in Appendix A within 30 days of the date of this Order.
7. Three years from the effective date of this Order Estill District No. 1 shall file an income statement, along with any pro forma adjustments, in sufficient detail to demonstrate that the rates approved herein are sufficient to meet its operating expenses and annual debt service requirements.

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 99-404 DATED October 22, 1999.

The following rates and charges are prescribed for the customers in the area served by Estill County Water District. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under the authority of this Commission prior to the effective date of this Order.

MONTHLY SURCHARGE

Cobb Hill User Surcharge

\$4.81

Nothing contained herein shall be deemed a warranty of the Commonwealth of Kentucky, or any agency thereof, of the financing herein accepted.

Done at Frankfort, Kentucky, this 22nd day of October, 1999.

By the Commission

ATTEST:

  
Executive Director



COMMONWEALTH OF KENTUCKY  
**PUBLIC SERVICE COMMISSION**

730 SCHENKEL LANE  
POST OFFICE BOX 615  
FRANKFORT, KY. 40602  
(502) 564-3940

October 1, 1999

To: All parties of record

RE: Case No. 99-404  
ESTILL COUNTY WATER DISTRICT #1  
(Construct, Finance, Rates; 278.023)

This letter is to acknowledge receipt of initial application in the above case. The application was date-stamped received September 22, 1999 and has been assigned Case No. 99-404. In all future correspondence or filings in connection with this case, please reference the above case number.

If you need further assistance, please contact my staff at 502/564-3940.

Sincerely,

A handwritten signature in cursive script that reads "Stephanie Bell".

Stephanie Bell  
Secretary of the Commission

SB/jc

Mr. Thomas G. Fern  
State Director  
Rural Development  
771 Corporate Drive, Suite 200  
Lexington, KY. 40503 5477

Mr. Thomas H. Coffey,  
Rural Development  
95 South Laurel Road, Suite A  
London, KY. 40744

Ms. Pam Cox  
Office Manager  
Estill County Water District No. 1  
76 Cedar Grove Road  
Irvine, KY. 40336

Mr. Don Sexton  
PEH Engineers, Inc.  
1525 Bull Lea Road, Suite 100  
Lexington, KY. 40511

Honorable Garrett T. Fowles  
Attorney at Law  
114 North Thirst Street  
Richmond, KY. 40475

Honorable W. Randall Jones  
Attorney at Law  
Rubin & Hays  
First Trust Centre  
200 South Fifth Street  
Louisville, KY. 40202

# Rubin & Hays

ATTORNEYS AT LAW

First Trust Centre, 200 South Fifth Street, Louisville, Kentucky 40202-3236  
Telephone (502) 569-7525 Telefax (502) 569-7555 Email: rh@rubinhays.com

CHARLES S. MUSSON  
W. RANDALL JONES  
CHRISTIAN L. JUCKETT

OF COUNSEL  
WM. CARL FUST

PARALEGAL  
MARY M. EMBRY

September 21, 1999

RECEIVED  
SEP 22 1999  
PUBLIC SERVICE  
COMMISSION

Ms. Helen C. Helton  
Executive Director  
Public Service Commission  
P.O. Box 615  
Frankfort, Kentucky 40602

Re: Estill County Water District No. 1

CASE 99-404

Dear Ms. Helton:

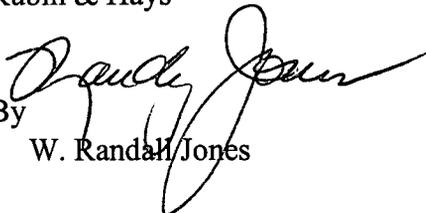
Enclosed please find the original and ten (10) copies of the Application of the Estill County Water District No. 1 for a Certificate of Public Convenience and Necessity to construct, finance and increase rates pursuant to KRS 278.023.

Also enclosed are eleven (11) copies of the exhibits required pursuant to 807 KAR 5.069, with the exception of the Preliminary and Final Engineering Reports, of which two copies are enclosed.

If you need any additional information or documentation, please let us know.

Sincerely,

Rubin & Hays

By   
W. Randall Jones

WRJ:jkm  
Enclosures  
cc: Distribution List

**DISTRIBUTION LIST**

Account No. 166.0000

Re: Estill County Water District No. 1 Waterworks and Sewer Revenue Bonds, Series 2000, in the amount of \$975,000

Mr. Thomas G. Fern  
State Director  
Rural Development  
771 Corporate Drive, Suite 200  
Lexington, Kentucky 40503-5477

Telephone: (606) 224-7336  
Fax: (606) 224-7425

Mr. Thomas H. Coffey, Jr.  
Rural Development  
95 South Laurel Road, Suite A  
London, Kentucky 40744

Telephone: (606) 864-2172  
Fax: (606) 878-7717

Ms. Pam Cox, Office Manager  
Estill County Water District No. 1  
76 Cedar Grove Road  
Irvine, Kentucky 40336

Telephone: (606) 723-3795  
Fax: (606) 726-9083

Mr. Don Sexton  
PEH Engineers, Inc.  
1525 Bull Lea Road, Suite 100  
Lexington, Kentucky 40511

Telephone: (606) 225-8500  
Fax: (606) 225-8501

Garrett T. Fowles, Esq.  
Attorney at Law  
114 North Third Street  
Richmond, Kentucky 40475

Telephone: (606) 624-9111  
Fax: (606) 624-3367

W. Randall Jones, Esq.  
Rubin & Hays  
First Trust Centre  
200 South Fifth Street  
Louisville, Kentucky 40202

Telephone: (502) 569-7525  
Fax: (502) 569-7555

RECEIVED

SEP 22 1999

PUBLIC SERVICE COMMISSION

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF ESTILL COUNTY WATER )  
DISTRICT NO. 1 OF ESTILL COUNTY, KENTUCKY, )  
FOR A CERTIFICATE OF PUBLIC CONVENIENCE ) CASE NO. 99-404  
AND NECESSITY TO CONSTRUCT, FINANCE )  
AND INCREASE RATES PURSUANT TO KRS 278.023. )

APPLICATION

This Application of the Estill County Water District No. 1 ("Applicant") of Estill County, Kentucky, respectfully shows:

1. That Applicant is a water district of Estill County, Kentucky, created and existing under and by virtue of Chapter 74 of the Kentucky Revised Statutes.

2. That the post office address of Applicant is:

Estill County Water District No. 1  
c/o Mr. Roy L. Embs, Chairman  
76 Cedar Grove Road  
Irvine, Kentucky 40336

3. That Applicant, pursuant to the provisions of KRS 278.020 and 278.023, seeks (i) a Certificate of Public Convenience and Necessity, permitting Applicant to construct a waterworks construction project, consisting of extensions, additions, and improvements (the "Project") to the existing waterworks system of Applicant; (ii) an Order approving increased rates; and (iii) approval of the proposed plan of financing said Project.

4. The project consists of the installation of approximately 45.7 miles of 3, 4 and 6 inch water lines with appurtenances, a new river crossing, two 80,000 gallon water storage tanks, two new booster pump stations, renovation of an existing pump station, and radio telemetry systems to serve customers in the northern and western sections of Estill County and the Cobhill area.

5. That Applicant proposes to finance the construction of the Project through (i) the issuance of \$975,000 of its Waterworks and Sewer Revenue Bonds, (ii) a Rural Development ("RD") Grant in the amount of \$900,000, (iii) a Community Development Block Grant ("CDBG") in the

amount of \$985,000, (iv) an Appalachian Regional Commission ("ARC") Grant in the amount of \$450,000, and (v) an Applicant contribution in the amount of \$88,800. Applicant has a commitment from the RD to purchase said \$975,000 of bonds maturing over a 40-year period, at an interest rate of not exceeding 4.50% per annum, as set out in the RD Letter of Conditions filed herewith as an Exhibit.

6. That Applicant does not contemplate having the Project constructed with any deviation from minimum construction standards of this Public Service Commission.

7. That Applicant files herewith the following Exhibits pursuant to 807 KAR 5:069 in support of this Application:

- A. Copy of RD Letter of Conditions.
- B. Copy of RD Letter of Concurrence in Bid Award.
- C. Copy of Preliminary and Final Engineering Reports.
- D. Certified statement from the Chairman of Applicant, based upon statements of the Engineers for Applicant, concerning the following:
  - (1) The proposed plans and specifications for the Project have been designed to meet the minimum construction and operating requirements set out in 807 KAR 5:066 Section 4(3) and (4); Section 5(1); Sections 6 and 7; Section 8(1) through (3); Section 9(1) and Section 10;
  - (2) All other state approvals or permits have already been obtained;
  - (3) The proposed rates of Applicant shall produce the total revenue requirements set out in the engineering reports; and
  - (4) Setting out the dates when it is anticipated that construction will begin and end.

8. That Applicant has arranged for the publication, prior to or at the same time this Application is filed, of a Notice of Proposed Rate Increase pursuant to Section 4 of 807 KAR 5:069, in the *Citizen Voice and Times*, which is the newspaper of general circulation in Applicant's service area and in Estill County, Kentucky. Said Notice sets out the current rates and the proposed rates of Applicant and a short description of the Project. A copy of said Notice is filed herewith as an Exhibit.

9. That the foregoing constitutes the documents necessary to obtain the approval of the Public Service Commission in accordance with Section 278.023 of the Kentucky Revised Statutes

and in accordance with the "Minimum Filing Requirements" specified in 807 KAR 5:069, Section 3.

WHEREFORE, Applicant, the Estill County Water District No. 1, asks that the Public Service Commission of the Commonwealth of Kentucky grant to Applicant the following:

- a. A Certificate of Public Convenience and Necessity permitting Applicant to construct a waterworks project consisting of extensions, additions, and improvements to the existing waterworks system of Applicant.
- b. An Order approving the financing arrangements made by Applicant, viz., the issuance of (i) \$975,000 of Estill County Water District No. 1 Waterworks and Sewer Revenue Bonds at an interest rate of not exceeding 4.50% per annum, (ii) an RD Grant in the amount of \$900,000, (iii) a CDBG Grant in the amount of \$985,000, (iv) and ARC Grant in the Amount of \$450,000, and (v) an Applicant contribution in the amount of \$88,800.
- c. An Order approving the proposed increased rates as set out in Section 22 of the RD Letter of Conditions filed herewith as an Exhibit.

ESTILL COUNTY WATER DISTRICT NO. 1

By: Roy Lee Embert  
Chairman  
Board of Water Commissioners

W. Randall Jones  
W. Randall Jones, Esq.  
Rubin & Hays  
Counsel for Applicant  
First Trust Centre  
200 South Fifth Street  
Louisville, Kentucky 40202  
(502) 569-7534





August 20, 1998

Mr. Roy Lee Embs  
Chairman, Estill County Water District  
76 Cedar Grove Road  
Irvine, Kentucky 40336

Dear Mr. Embs:

This letter establishes conditions which must be understood and agreed to by you before further consideration may be given to the application. The (loan and/or grant) will be administered on behalf of the Rural Utilities Service (RUS) by the State and Area office staff of USDA, Rural Development. Any changes in project cost, source of funds, scope of services or any other significant changes in the project or applicant must be reported to and approved by USDA, Rural Development, by written amendment to this letter. Any changes not approved by Rural Development shall be cause for discontinuing processing of the application. It should also be understood that Rural Development is under no obligation to provide additional funds to meet an overrun in construction costs.

This letter is not to be considered as loan and/or grant approval or as a representation as to the availability of funds. The docket may be completed on the basis of a RUS loan not to exceed \$975,000, a RUS grant not to exceed \$900,000, an Appalachian Regional Commission (ARC) grant \$450,000, a Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) of \$985,000 and a cash contribution from the applicant in the amount of \$22,000.

If Rural Development makes the loan, you may make a written request that the interest rate be the lower of the rate in effect at the time of loan approval or the time of loan closing. If you do not request the lower of the two interest rates, the interest rate charged will be the rate in effect at the time of loan approval. The loan will be considered approved on the date a signed copy of Form RD 1940-1, "Request for Obligation of Funds," is mailed to you. If you want the lower of the two rates, your written request should be submitted to Rural Development as soon as practical. In order to avoid possible delays in loan closing, such a request should ordinarily be submitted at least 30 days before loan closing.

Please complete and return the attached Form RD 1942-46, "Letter of Intent to Meet Conditions," if you desire that further consideration be given to your application.

The "Letter of Intent to Meet Conditions" must be executed within three weeks from the date of this letter or it becomes invalid unless a time extension is granted by Rural Development.

If the conditions set forth in this letter are not met within 240 days from the date hereof, Rural Development reserves the right to discontinue the processing of the application.

In signing Form RD 1942-46, you are agreeing to complete the following as expeditiously as possible:

1. Number of Users and Their Contribution:

There shall be 471 existing sewer users and 2,917 water users, of which 2,633 are existing users and 284 are new users contributing \$66,800 in connection fees toward the cost of the project. The connection fees will be collected prior to advertising for construction bids and will be placed in the construction account at loan pre-closing, unless spent for authorized purposes prior to loan pre-closing. The Rural Development Manager will review and authenticate the number of users and amount of connection fees prior to advertising for construction bids.

1a. Grant Agreement:

Attached is a copy of RUS Bulletin 1780-12, "Water and Waste System Grant Agreement," for your review. You will be required to execute a completed form at the time of grant closing.

1b. Drug-Free Work Place:

Prior to grant approval, the Water District will be required to execute Form AD-1049, "Certification Regarding Drug-Free Workplace Requirements (Grants) Alternative I - For Grantees Other Than Individuals."

2. Repayment Period:

The loan will be scheduled for repayment over a period not to exceed 40 years from the date of the bond. Principal payment will not be deferred for a period in excess of two (2) years from the date of the bond. Payments will be in accordance with applicable KRS which requires interest to be paid semi-annually (February 1st and August 1st) and principal will be due on or before the first of February. Rural Development may require the Water District to adopt a supplemental payment agreement providing for monthly payments of principal and interest so long as the bond is held or insured by RUS. Monthly payments will be approximate amortized installments.

Rural Development encourages the use of the Preauthorized Debit (PAD) payment process, which authorizes the electronic withdrawal of funds from your bank account on the exact installment payment due date (contact the Rural Development Manager for further information).

3. Funded Depreciation Reserve Account:

The Water District will be required to deposit \$455.00 per month into a "Funded Depreciation Reserve Account". The monthly deposits are for the life of the loan.

The required deposits to the Reserve Account are in addition to the requirements of the Water District's prior bond resolutions.

The annual deposit to the Reserve Account are required to commence the first full fiscal year after the facility becomes operational.

4. Security Requirements:

A combined pledge of gross water and sewer revenues will be provided in the Bond Resolution. Bonds shall rank on a parity with existing bonds, if possible. If this is not possible, the bond will be subordinate and junior to the existing bonds, in which case the Water District will be required to abrogate its right to issue additional bonds ranking on a parity with the existing bonds, so long as any unpaid indebtedness remains on this bond issue.

5. Land Rights and Real Property:

The Water District will be required to furnish satisfactory title, easements, etc., necessary to install, maintain and operate the facility to serve the intended users. The pipelines will be on private rights-of-way where feasible. Easements and options are to be secured prior to advertising for construction bids.

6. Organization:

The Water District will be legally organized under applicable KRS which will permit them to perform this service, borrow and repay money.

7. Business Operations:

The Water District will be required to operate the system under a well-established set of resolutions, rules and regulations. A budget must be established annually and adopted by the Water District after review by Rural Development. At no later than loan pre-closing, the Water District will be required to furnish a prior approved management plan to include, as a minimum, provisions for management, maintenance, meter reading, miscellaneous services, billing, collecting, bookkeeping, making and delivering required reports and audits.

8. Accounts, Records and Audits:

The Water District will be required to maintain adequate records and accounts and submit statistical and financial reports, quarterly and annually, in accordance with subsection 1780.47 of RUS Instruction 1780 and RUS Staff Instruction 1780-4, a copy of which is enclosed. The enclosed audit booklet will be used as a guide for preparation of audits. The Water District will be required to establish and maintain separate accounts for each system. Annual audits, budgets, and reports will be submitted to Rural Development showing separate accounts. The Water District shall be required to submit a copy of its audit agreement for review and approval prior to pre-closing the loan. The Water District shall obtain the assistance of its accountant to establish the Water District's accounting system. Rural Development approval of the accounting system is required.

9. Accomplish Audits for Years in Which Federal Financial Assistance is Received:

The Water District will accomplish audits in accordance with OMB Circular A-133, during the years in which federal funds are received. The Water District will provide copies of the audits to the Area Office and the appropriate Federal cognizant agency as designated by OMB Circular A-133.

10. Insurance and Bonding:

The following insurance and bonding will be required:

- A. Adequate Liability and Property Damage Insurance including vehicular coverage, if applicable, must be obtained and maintained by the Water District. The Water District should obtain amounts of coverage as recommended by its attorney, consulting engineer and/or insurance provider.
- B. Worker's Compensation - The Water District will carry worker's compensation insurance for employees in accordance with applicable state laws.
- C. Fidelity Bond - The Water District will provide Fidelity Bond Coverage for all persons who have access to funds. Coverage may be provided either for all individual positions or persons, or through "blanket" coverage providing protection for all appropriate employees and/or officials. The amount of coverage required for all RUS loans is \$148,000.
- D. Real Property Insurance - The Water District will obtain and maintain adequate fire and extended coverage on all structures including major items of equipment or machinery located in the structures. The amounts of coverage should be based on recommendations obtained by the Water District from its attorney, consulting engineer and/or insurance provider. Subsurface lift stations do not have to be covered except for the value of electrical and pumping equipment therein.
- E. Flood Insurance - The Water District will obtain and maintain adequate coverage on any facilities located in a special flood and mudslide prone areas.

11. Planning and Performing Development:

- A. The engineer should not be authorized to commence work on final plans and specifications until a determination has been made that the project can be planned and constructed within the estimated cost shown in paragraph "20" of this letter. The engineer may then proceed to develop final plans and specifications to be completed no later than 210 days from this date, and prepare bid documents. The Rural Development Manager is prepared to furnish the necessary guide for him to follow so as to keep the project plans and documents within our guidelines and requirements. The project should not be advertised for construction bids until all easements and enforceable options have been obtained, and total funds are committed or available for the project.
- B. The following documents will be submitted to Rural Development for review and must be concurred in by Rural Development prior to advertisement for construction bids:
1. Final plans, specifications and bid documents.
  2. Applicant's letter on efforts to encourage small business and minority-owned business participation.
  3. Legal Service Agreements.
  4. Engineering Agreements.

Revision in these documents will be subject to Rural Development concurrence. Any agreements, contracts, etc. not reviewed and approved by Rural Development will not be eligible for payment from project funds or revenues from facilities financed by this Agency.

Prior to receipt of an authorization to advertise for construction bids, the Water District will obtain advance clearance from Bond Counsel regarding compliance with KRS 424 pertaining to publishing of the advertisement for construction bids in local newspapers and the period of time the notice is required to be published.

12. Compliance with Section 504 of the Rehabilitation Act of 1973:

The Water District will be required to comply with Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), in order to make sure no handicapped individual, solely by reason of their handicap, is excluded from participation in the use of the water system, be denied the benefits of the water system, or be subjected to discrimination.

13. Closing Instructions:

The Office of General Counsel, our Regional Attorney, will be required to write closing instructions in connection with this loan. Conditions listed therein must be met by the Water District.

14. Compliance with Special Laws and Regulations:

The Water District will be required to conform with any and all state and local laws and regulations affecting this type project.

15. System Operator:

The Water District is reminded that the system operator must have an Operator's Certificate issued by the State.

16. Prior to Pre-Closing the Loan, the Water District will be Required to Adopt:

- A. Form RD 1942-47, "Association Loan Resolution (Public Body)."
- B. Form RD 400-1, "Equal Opportunity Agreement."
- C. Form RD 400-4, "Assurance Agreement."
- D. Form AD-1047, "Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transaction."
- E. Form RD 1910-11, "Applicant Certification Federal Collection Policies for Consumer or Commercial Debts."
- F. FmHA Instruction 1940-Q, Exhibit A-1, "Certification for Contracts, Grants and Loans."

The Water District must offer the opportunity for all residents in the service area to become users of the facilities regardless of race, creed, color, religion, sex, national origin, marital status, physical or mental handicap or level of income.

17. Refinancing and Graduation Requirements:

The Water District is reminded that if at any time it shall appear to the Government that the Water District is able to refinance the amount of the RUS indebtedness then outstanding, in whole or in part, by obtaining a loan from commercial sources at reasonable rates and terms, upon the request of the Government, the Water District will apply for and accept such loan in sufficient amount to repay the Government.

18. Commercial Interim Financing:

The Water District will be required to use commercial interim financing for the project during construction for the RUS loan portion of the financing, if available at reasonable rates and terms.

Before the loan is closed, the Water District will be required to provide Rural Development with statements from the contractor, engineer and attorneys that they have been paid to date in accordance with their contract or other agreements and, in the case of the contractor, that he has paid his suppliers and sub-contractors.

19. Disbursement of Project Funds:

A construction account for the purpose of disbursement of project funds (RUS) will be established by the Water District prior to start of construction. The position of officials entrusted with the receipt and disbursement of RUS project funds will be covered by a "Fidelity Bond," with USDA-Rural Development as Co-Obligee, in the amount of construction funds on hand at any one time during the construction phase.

During construction, the Water District shall disburse project funds in a manner consistent with subsection 1780.76 (e) of RUS Instruction 1780. Form RD 1924-18, "Partial Payment Estimate," or similar form approved by Rural Development, shall be used for the purpose of documenting periodic construction estimates, and shall be submitted to Rural Development for review and acceptance. Prior to disbursement of funds by the Water District, the Board of Directors shall review and approve each payment estimate. All bills and vouchers must be approved by Rural Development prior to payment by the Water District.

Form RD 440-11, "Estimate of Funds Needed for 30-Day Period Commencing \_\_\_\_\_," will be prepared by the Water District and submitted to Rural Development in order that a periodic advance of federal cash may be requested.

Monthly audits of the Water District's construction account records shall be made by Rural Development.

20. Cost of Facility:

Breakdown of Costs:

Development	\$ 2,672,800
Land and Rights	30,000
Legal and Administrative	72,000
Engineering	328,000
Interest	70,000
Contingencies	<u>226,000</u>
TOTAL	\$ 3,398,800

Financing:

RUS Loan	\$ 975,000
RUS Grant	900,000
HUD-CDBG	985,000
ARC Grant	450,000
Applicant Contribution	<u>88,800</u>
TOTAL	\$ 3,398,800

21. Use of Remaining Project Funds:

The applicant contribution shall be considered as the first funds expended. After providing for all authorized costs, any remaining project funds will be considered to be RUS/ARC/CDBG grant funds and refunded in proportion to participation in the project. If the amount of unused grant funds exceeds the grants, that part would be RUS loan funds.

22. Rates and Charges:

Rates and charges for facilities and services rendered by the Water District must be at least adequate to meet cost of maintaining, repairing and operating the water and sewer systems and meeting required principal and interest payments and the required deposits to debt service and/or depreciation reserve.

Water rates will be at least: 5/8" x 3/4" Meter Size

First	2,000	gallons @ \$	10.28 - Minimum Bill.
Next	3,000	gallons @ \$	4.89 - per 1,000 gallons.
Next	5,000	gallons @ \$	4.74 - per 1,000 gallons.
All Over	10,000	gallons @ \$	3.24 - per 1,000 gallons.

Water rates will be at least: 1" Meter Size

First	5,000	gallons @ \$	24.95 - Minimum Bill.
Next	5,000	gallons @ \$	4.74 - per 1,000 gallons.
All Over	10,000	gallons @ \$	3.24 - per 1,000 gallons.

Water rates will be at least: 2" Meter Size

First	16,000	gallons @ \$	68.09 - Minimum Bill.
All Over	16,000	gallons @ \$	3.24 - per 1,000 gallons.

Sewer rates will be at least:

Minimum Bill - \$13.00 for first 2,000 gallons.

All Over	2,000	gallons @ \$	6.50 - per 1,000 gallons.
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Bulk Loading Station - \$3.52 per 1,000 gallons.

Bulk Meter Sales to Powells Valley Water District - \$1.91 per 1,000 gallons.

23. Water Purchase Contract:

The Water District will submit a Water Purchase Contract for approval by Rural Development before advertising for construction bids. If the contract is not on Form RD 442-30, "Water Purchase Contract," the contract will require approval by our Regional Attorney. The contract must meet the requirements of subsection 1780.62 of RUS Instruction 1780.

24. Commitment of HUD, ARC Grants and Cash Contribution:

This Letter of Conditions is issued contingent upon a firm commitment being in effect prior to advertising for construction bids for the HUD Grant in the amount of \$985,000, for the ARC Grant in the amount of \$450,000 and for the cash contribution from the applicant in the amount of \$22,000.

25. Floodplain Construction:

The Water District will be required to pass and adopt a Resolution or amend its By-Laws whereby the Water District will deny any water service to any future customer wishing to build on or develop property located within a designated floodplain. If a customer or developer requests service for construction in a designated floodplain, the customer or developer must provide evidence and a justification for approval by the Water District and Rural Development officials that there are no other alternatives to construction or development within the designated floodplain. The community must be a participant in the National Flood Insurance Program (NFIP) and the customer or developer must obtain the required permits prior to the tap on restrictions being waived.

26. Final Approval Conditions:

Final approval of this loan will depend on your willingness, with the assistance of all your co-workers, to meet the conditions of this letter in an orderly and systematic manner. Then too, final approval will depend on funds being available.

In accordance with the intent of Congress as expressed in the FY 1998 Appropriations Act, recipients of Water and Waste assistance provided by the Rural Utilities Service are encouraged, in expending the assistance, to purchase only American-made equipment and products.

If you desire to proceed with your application, the Rural Development Manager will allot a reasonable portion of his time to provide guidance in application processing.

Sincerely,

  
THOMAS G. FERN  
State Director  
Rural Development

Enclosures

cc: Rural Development Manager - London, Kentucky  
Community Development Manager - Richmond, Kentucky  
Bluegrass ADD - Lexington, Kentucky  
~~Mike Moreland - Irvine, Kentucky~~ *Garrett Fowler*  
✓ Rubin and Hays - Louisville, Kentucky  
PEH Engineers, Inc. - Lexington, Kentucky  
PSC - ATTN: Claude Rhorer - Frankfort, Kentucky



United States  
Department of  
Agriculture

Rural  
Development

771 Corporate Drive, Suite 200  
Lexington, KY 40503-6477  
(606) 224-7336 TTY (606) 224-7422

September 13, 1999

Mr. Roy Lee Embs, Chairman  
Estill County Water District  
76 Cedar Grove Road  
Irvine, Kentucky 40336

Re: Letter of Conditions Dated August 20, 1998

Dear Mr. Embs:

This letter shall serve as Amendment No. 1 to your Letter of Conditions dated August 29, 1998. The purpose of the amendment is to revise the proposed water rates to include a monthly surcharge to the users served by the proposed Cob Hill Water Project.

Paragraph numbered "22" is revised to read as follows:

" 23. Rates and Charges:

Rates and charges for facilities and services rendered by the Water District must be at least adequate to meet cost of maintaining, repairing and operating the water and sewer systems and meeting required principal and interest payments and the required deposits to debt service and/or depreciation reserve.

Water rates will be at least: 5/8" X 3/4" Meter Size

First	2,000	gallons @ \$	10.28 - Minimum Bill.
Next	3,000	gallons @ \$	4.89 - per 1,000 gallons.
Next	5,000	gallons @ \$	4.74 - per 1,000 gallons.
All Over	10,000	gallons @ \$	3.24 - per 1,000 gallons.

Water rates will be at least: 1" Meter Size

First	5,000	gallons @ \$	24.95 - Minimum Bill.
Next	5,000	gallons @ \$	4.74 - per 1,000 gallons.
All Over	10,000	gallons @ \$	3.24 - per 1,000 gallons.

Water rates will be at least: 2" Meter Size

First	16,000	gallons @ \$	68.09 - Minimum Bill.
All Over	16,000	gallons @ \$	3.24 - per 1,000 gallons.

Estill County Water District

Page 2

Bulk Loading Station - \$3.52 per 1,000.

Bulk Meter Sales to Powell's Valley Water District - \$1.91 per 1,000 gallons.

Cobb Hill Users Surcharge - \$4.81 Flat Fee

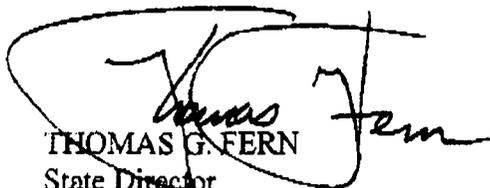
Sewer rates will be at least:

First 2,000 gallons @ \$ 13.00 - Minimum Bill.

All Over 2,000 gallons @ \$ 6.50 - per 1,000 gallons."

All other provisions of the referenced Letter of Conditions remain in full force and unchanged.

Sincerely,



THOMAS G. FERN

State Director

Rural Development

cc: Rural Development Manager - London, Kentucky  
Community Development Manager - Richmond, Kentucky  
Bluegrass ADD - Lexington, Kentucky  
Mike Moreland - Irvine, Kentucky  
Rubin and Hays - Louisville, Kentucky  
PEH Engineers, Inc. - Lexington, Kentucky  
PSC - ATTN



September 14, 1999

SUBJECT: Estill County Water District  
Concurrence in Contract Award

TO: Rural Development Manager  
London, Kentucky

Based on the bids received and the recommendation of the consulting engineer, Rural Development concurs in the award of the follow subject contracts to the respective low bidders:

Contract 11 & 12 – Waterline Extensions to G&W Construction

Contract 11, in the amount of \$609,948.32

Contract 12, in the amount of \$896,251.74

Contract 13 – Elevated Water Storage Tank to Aaron Construction

Contract 13, in the amount of \$207,866.00

If you have any questions, please call Jo Ann Clark at (606)224-7348.



THOMAS G. FERN  
State Director  
Rural Development

cc: PEH Engineers, Inc.  
Lexington, Kentucky

✓ Rubin and Hays  
Louisville, Kentucky

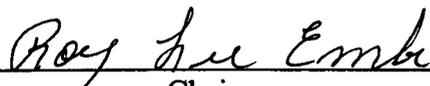
**CERTIFICATE OF CHAIRMAN OF ESTILL COUNTY WATER DISTRICT NO. 1,  
AS TO STATEMENT REQUIRED BY SECTION 3(2)(D) OF 807 KAR 5:069**

I, Roy L. Embs, hereby certify that I am the duly qualified and acting Chairman of the Estill County District No. 1 of Estill County, Kentucky, and that said District is in the process of arranging to finance the construction of extensions, additions and improvements to the existing waterworks system of the District (the "Project"), in cooperation with PEH Engineers, Lexington, Kentucky, the Engineers for the District (the "Engineers").

Based on information furnished to me by said Engineers for the District, I hereby certify as follows:

1. That the proposed plans and specifications for the Project have been designed to meet the minimum construction and operating requirements set out in 807 KAR 5:066 Section 4(3) and (4); Section 5(1); Sections 6 and 7; Section 8(1) through (3); Section 9(1) and Section 10.
2. That all other state approvals and/or permits have already been obtained.
3. That the rates proposed by the District in its current Application filed with the Public Service Commission of Kentucky are contemplated to produce total revenue requirements set out in the Engineering Reports prepared by such Engineers and filed with the Public Service Commission.
4. That it is now contemplated that construction of the Project will begin on or about October 1, 1999, and will end on or about July 1, 2000.

IN TESTIMONY WHEREOF, witness my signature this September 10, 1999.

  
\_\_\_\_\_  
Chairman  
Estill County Water District No. 1

STATE OF KENTUCKY    )  
                                  ) SS  
COUNTY OF ESTILL    )

Subscribed and sworn to before me by Roy L. Embs, Chairman of the Board of Commissioners of the Estill County Water District No. 1, on this September 10, 1999.

  
\_\_\_\_\_  
Notary Public  
In and For Said State and County

(Seal of Notary)

## NOTICE OF PROPOSED RATE INCREASE

In accordance with the requirements of the Public Service Commission of the Commonwealth of Kentucky as set out in 807 KAR 5:069, Section 4, notice is hereby given to the customers of the Estill County Water District No. 1 of Estill County, Kentucky, of an increase to the District's rate schedule as set forth herein.

The proposed rate increase is required by the United States Department of Agriculture, acting by and through Rural Development ("RD"), in connection with a loan by RD to the District in the amount of \$975,000 to be evidenced by the issuance by the District of its Waterworks and Sewer Revenue Bonds in such amount, which RD has agreed to purchase provided the District meets certain conditions of RD, including increasing water rates as set forth below:

### Current Monthly Water Rates

#### 5/8" x 3/4" Meter:

First 2,000 gallons	\$10.28 minimum bill
Next 3,000 gallons	4.89 per 1,000 gallons
Next 5,000 gallons	4.74 per 1,000 gallons
All over 10,000 gallons	3.24 per 1,000 gallons

#### 1" Meter:

First 5,000 gallons	\$24.95 minimum bill
Next 5,000 gallons	4.74 per 1,000 gallons
All over 10,000 gallons	3.24 per 1,000 gallons

#### 2" Meter:

First 16,000 gallons	\$68.09 minimum bill
All over 16,000 gallons	3.24 per 1,000 gallons

Bulk Loading Station	\$3.52 per 1,000 gallons
Bulk Meter Sales to Powells Valley Water District	\$1.91 per 1,000 gallons

### Current Monthly Sewer Rates

First 2,000 gallons	\$13.00 minimum bill
All over 2,000 gallons	6.50 per 1,000 gallons



AFFIDAVIT OF PUBLICATION OF  
NOTICE OF PROPOSED RATE INCREASE

I, \_\_\_\_\_, hereby certify that I am \_\_\_\_\_ of the *Citizen Voice and Times*, that said newspaper is the newspaper having the largest bona fide circulation which is published in the City of Irvine, Kentucky, and which is published in Estill County, Kentucky, and that said newspaper is the newspaper published in said County meeting the requirements of Sections 424.110 and 424.120 of the Kentucky Revised Statutes for official publications required to be made by said County and for official publications required to be made by the Estill County Water District No. 1, there being no newspaper meeting such requirements which is published within the boundaries of said District.

I certify that the attached copy of a Notice of Proposed Rate Increase is a true copy of said Notice as published in said newspaper on September 23, 1999.

IN TESTIMONY WHEREOF, witness my signature this \_\_\_\_ day of September, 1999.

*CITIZEN VOICE AND TIMES*

By \_\_\_\_\_

Subscribed and sworn to before me on this \_\_\_\_ day of September, 1999.

My Commission expires: \_\_\_\_\_.

\_\_\_\_\_  
Notary Public  
Estill County, Kentucky

(Seal of Notary)

RECEIVED

SEP 22 1999

PUBLIC SERVICE  
COMMISSION

**FINAL  
ENGINEERING REPORT**

for

**PHASE 6/ COB HILL WATER PROJECT  
WATER PROJECT  
ESTILL COUNTY, KENTUCKY**

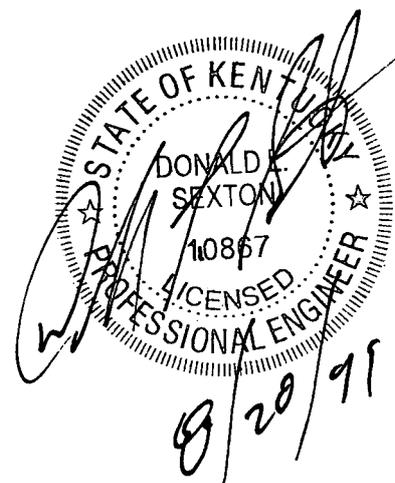
for

**ESTILL COUNTY WATER DISTRICT  
IRVINE, KENTUCKY**

August, 1999

Prepared by:

**PEH Engineers, Inc.  
1525 Bull Lea Road, Suite 100  
Lexington, Kentucky 40511**



**1. PURPOSE OF THE REPORT:**

The purpose of this report is to define the project, compare the bids received to the estimated construction cost and review the project budget.

**2. SCOPE OF THE PROJECT:**

The project was bid a three separate contracts:

**Contract 11:** Consists of extending existing water lines to homes located throughout Estill County not currently being provided potable water service. Also included in this contract is a new 12" river crossing replacing the existing inadequate 6" line and adding a telemetry system to two existing tanks and one existing pumping station..

**Contract 12:** Consists of constructing a new water system to serve the homes located in the Cob Hill Area of the county.

**Contract 13:** Consists of constructing a new water storage tank, pumping station and telemetry system in the Cob Hill Area.

**3. CONSTRUCTION BIDS:**

The Engineer's final opinion of probable construction cost was as follows:

Contract 11	\$ 848,655.00
Contract 12	\$ 1,191,565.00
Contract 13	\$ <u>225,000.00</u>
Total Estimated Construction Cost	\$ 2,265,220.00

The lowest bids received were as follows:

Contract 11 - G. & W. Construction	\$ 609,948.32
Contract 12 - G. & W. Construction	\$ 896,251.74
Contract 13 - Aaron Contractors	\$ <u>207,866.00</u>
Total Projected Construction Cost	\$ 1,714,066.06

**4. PROJECT COSTS:**

The total opinion of probable project costs based on the bids, which consists of both construction and non-construction items is presented as follows:

Construction Cost	\$ 1,714,066.00
Basic Engineering	127,184.00
Preliminary Engineering Report	40,000.00
Resident Observation	66,600.00
Additional Services	50,000.00
Geotechnical	3,500.00
Archaeological	2,000.00
Easements and Property	30,000.00
Legal and Admin.	20,000.00
Other	<u>50,000.00</u>
Total (less contingencies)	\$ 2,103,350.00

**5. AVAILABLE PROJECT FUNDING:**

Available project funding is as follows:

CDBG Grant	\$ 985,000
RECD Grant	900,000
RECD Loan	975,000
ARC Grant	450,000
Applicant - User Connection Fees	<u>22,000</u>
Total Funds Available	\$ 3,332,000

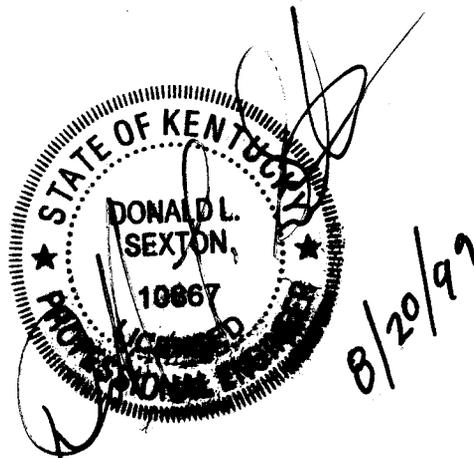
This leaves approximately \$ 1,228,650 available for contingencies. It is anticipated that any excess funds can be utilized by change orders to extend service into the Knob Lick Area as well as other system improvements. An additional \$ 300,000 of state funds have been approved for the Knob Lick Area as well.

RECEIVED

SEP 22 1999

PUBLIC SERVICE  
COMMISSION

Preliminary  
Engineering Report  
for  
**Water System  
Improvements**



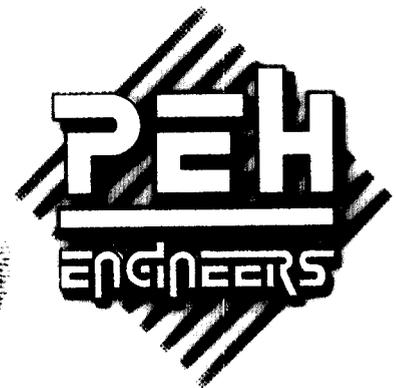
**Estill County  
Water District**

October 1997

**Professional**

**Engineering**

**Services**



**TABLE OF CONTENTS**

<u>ARTICLE</u>	<u>DESCRIPTION</u>	<u>PAGE NO.</u>
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**APPENDIX**

<u>SUMMARY / ADDENDUM</u>	1-35
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FIGURES

DESCRIPTION

1	Peak Demand Curve
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TABLES

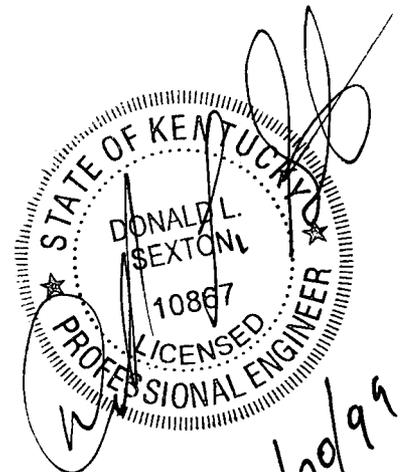
DESCRIPTION

1	Estimated Construction Cost
2	Estimated Project Cost

EXHIBITS

DESCRIPTION

1	Water System Improvements
---	---------------------------



1.    **PURPOSE OF REPORT**

This report describes the scope of the proposed project and presents the general background data used in its planning and development. Design criteria and financial data, including a rate analysis, are presented and discussed.

2.    **GENERAL BACKGROUND DATA**

The Estill County Water District (ECWD) authorized PEH Engineers in August 1992 to investigate the feasibility of designing water system improvements and extensions to rural Estill County. Citizens in the proposed new water service area have expressed considerable interest to the County Judge Executive and the Water Commissioners. The concerns focused on the need for a safe, reliable source of potable water in areas presently served by wells, springs, and cisterns. PEH was also asked to maintain or improve the level of service to existing customers in the vicinity of the extensions. The next step in accomplishing the goals set forth by the ECWD is the construction of Phase VI.

In August 1995, a Rural Development (RD) Preapplication, prepared by PEH, was filed by the ECWD, with a revision being filed in June, 1997 Exhibit 1 in the Appendix shows the location of the proposed improvements project. The Kentucky State Clearinghouse comments have been received and there are no conflicts with the State's goals, plans or objectives.

3.    **EXISTING SYSTEM**

The Estill County Water District (ECWD) was first formed in 1960 to provide water service to rural Estill County. Since its beginning, the District has developed into one of the largest and more experienced rural water suppliers in the state. The Commissioners endeavor to provide quality water service to their customers at a reasonable and economical rate. On a daily basis, the system is run and operated by a staff of well trained, conscientious and highly motivated individuals. The ECWD water system is regulated by the Kentucky Department for Environmental Protection and the Public Service Commission and is subject to meeting state and federal regulations.

The ECWD purchases all of its water from the City of Irvine (Irvine Municipal Utilities - IMU) through two (2) master meters. IMU's raw water supply is drawn from the Kentucky River and its treatment plant has a capacity of 2 million gallons per day. IMU has enough unused water treatment capacity to accommodate the improvements to the Estill County Water District system. The average demand by the new customers will be 42,000 gallons per day.

The system consists of two (2) major service areas separated by the Kentucky River. These two areas are the South of the Kentucky River area (SKRSA) and the North of the Kentucky River area (NKRSA). The SKRSA was constructed during phases I and II of the development of the ECWD. This part of the system includes 1 - 155,000 gallon standpipe at Wisemantown, 1 - 200,000 gallons standpipe at Winston, 1 - 112,000 gallons standpipe at Sandhill, 1 - 108,000 gallons standpipe and 1 - 116,000 gallons standpipe at Barnes Mountain (Phase V), 1 - 120 gallon per minute (gpm) booster pumping station at Pea Ridge, 1 - 150 gpm booster pumping station at Sandhill, 1 - 100 gpm temporary pumping station at the northwest end of West Irvine, 1 - 200 gallons per minute and 1 - 75 gallons per minute booster station at Barnes Mountain (Phase V), and approximately 19,000' of 2" pipe, 39,990' of 3" pipe, 100,750' of 4" pipe, 225,330' of 6" pipe, and 19,000' of 8" pipe. The temporary pumping station is manually operated, while the rest are radio telemetry controlled.

The construction Phases III and IV were located in the NKRSA. This part of the system includes 1 - 200,000 gallons standpipe at Iron Mountain, 1 - 113,000 gallons standpipe at Palmer, 1 - 150 gpm booster pumping station at Dry Branch, 1 - 50 gpm booster pump station at Ivory Hill and approximately 16,000' of 2" pipe, 90,000' of 3" pipe, 190,000' of 4" pipe, 100,000' of 6" pipe, and 2,000' of 8" pipe. Both the Dry Branch and Ivory Hill pumping stations are radio telemetry controlled.

The Phase 5 Water System Water System Improvements includes 23 miles of 8", 6" and 4' water main. The improvements portion of project includes two 100,000 gallons storage tanks, two booster pumping stations and office/maintenance building and is funded with a loan in amount of \$505,00 from RD and grants in amount of \$676,500 from RD, \$300,000 from ARC and \$685,200 CDBG. As of January 1996, interim financing has been obtained from Kentucky Rural water and the project is under construction. A total of 240 customers will initially served by this extension.

4. **SCOPE OF PROJECT**

This Phase VI project was separate into two project areas, both for ease of description and also to shown the separate funding allocation. The Phase 6 Original portion of the project will expand water service to the northern and western sections of Estill County. The Cobhill Area expansion portion will serve the eastern portion of the county.

**Phase 6 Original:**

The proposed Phase 6 Original Water expansion portion of the project consists of basically 18.3 miles of 6", 4" and 3" PVC water main, 500 feet of river crossing pipe, renovation to a pump station and a radio telemetry system. A total of 148 new customers will initially be served by these extensions. The proposed extensions and customers are as follows:

<u>Location</u>	<u>Pipe Diameter</u>	<u>Length (feet)</u>	<u>Potential Customers</u>
Lily Ferry Road	4"	7,200	11
Iron -Work Road	4"	4,224	12
Burton-William Road	3"	5,800	5
Noland Creek Rd.	4"	5,500	12
Lock Rd.	4"	3,300	3
Wiseman Crossing Rd.	4"	3,600	10
Dry Ridge Road	6"	10,000	6
Ky. 52 /Richmond Rd	4"	2,500	4
Hoyes Fork Rd.	6"	2,500	11
Nolan Blackburn Road	4"	5,000	9
Walton Road	4"	5,800	14
Ky. 499	6"	6,200	7
Ky. Hwy. 52	6"	3,700	*
Stacey Lane	4"	2,000	5
Little Doe Creek Rd.	4"	5,000	10

PEH Engineers      Estill County Water District

Redlick Rd.	4"	6,200	5
Macedonia Cem. Rd.	4"	6,800	8
Kissey Branch Road	3"	10,000	16
Kentucky River crossing	8"	1,450	
<b>TOTALS</b>		96,774	148

\* These are reconnections, not new customers

*101,050*

**COBHILL AREA:**

The Proposed Cobhill Area expansion portion consists of basically 27.4 miles of 6", 4" and 3" PVC water main. In order to serve the Cobhill Area , two 80,000 gallons storage tanks and two booster pumping stations will be built. This portion of the project will serve 207 addition customers while extending water to the Episcopal Diocese " The Cathedral Domain" conference center , a 460,000 gallons yearly water user in northern Lee County near Crystal, Kentucky. The proposed extensions and customers are as follow:

<u>Location</u>	<u>Pipe Diameter</u>	<u>Length (feet)</u>	<u>Potential Customers</u>
Miller Creek Road	4"	26,325	38
Texola Road	3"	13,200	19
Ky. 52 (Ky. 1182 to the Cathedral Domain Center	6"	32,000	38
Fitchburg	4"	19,000	25
Cobhill Road	6"	15,500	55
	4"	5,500	
	3"	6,000	
Cobhill-Furance Road	4"	27,000	32
Booster Pumping Station	2 Ea.		
Water Storage Tank	2 Ea.		
<b>TOTALS</b>		144,525	207

5. ESTIMATED WATER USAGE

Presently, ECWD serves 2563 customers of which approximately 96% are residential. The average monthly water usage by 2459 existing residential customers as determined by billings for the 12 month period between January 1996 and December 1996 was 10,461,167 gallons (142 gpcpd). The average monthly water usage for the entire ECWD was 11,587,500 gallons (151 gpcpd), not including unaccounted for water. Average monthly demand per residential customer (5/8" X 3/4" meter) calculates to 4,250 gallons.

The Bluegrass Area Development District plan recommends that the District be served by the IMU water treatment plant. The rated 24 hour capacity of the IMU plant is 2.0 million gallons and the average daily production in 1996 was 1.122 MG with a peak day production of 1.527 MG. The ECWD currently has a water purchase contract with the IMU and may purchase up to 20 million gallons per month. This contract was amended in 1991 and also extended the terms until the year 2030.

6. DESIGN CRITERIA

A. Hydraulic Considerations

Hydraulic calculations are based on the Hazen and Williams formula with a "C" value of 140 for PVC pipe and 130 for ductile iron pipe. The economy of polyvinyl chloride (PVC) pipe has caused it to be the predominant material for rural water system pipelines. The relatively high flow coefficient of C = 140 is common value for PVC water systems and is, therefore, used in the design of this system. The same is true of C = 130 for ductile iron.

Peak flows for determining line sizes are calculated using the relationship between demand per customer and total customers shown in the figures for Maximum Domestic Demand. The class 3 curve was utilized in determining the maximum domestic demand for the proposed extensions. These values have proven to be slightly conservative in practice, but since their use leaves room for expansion, they are considered valid for design purposes. Additional future capacity is insured by a minimum of five (5) gallons per minute into each dead end line.

Line sizes are designed to maintain a minimum of 30 pounds per square inch (psi) at the service meter during peak flows.

Fire protection capacity is not designed into the system. Hydrants are normally for blow-off purposes. Service meters, valves, and other appurtenances are designed for basically rural-domestic water supply service only.

B. Construction Considerations

The pipeline will be constructed on private easement, some state and county rights-of-way. Estill County is underlain by shale and limestone formations. Based upon previous construction projects and the District's construction experience, the determination was made that, at the proposed construction sites, rock removal would be required. Estimates are based on current bid prices in similar terrain.

7. FINANCIAL

A. Construction and Project Costs

Construction and project cost estimates are presented in Tables 1 and 2 of the Appendix. Estimated construction and project costs are respectively \$2,672,812 and \$3,398,817. Construction cost estimates are based on current bid prices for similar projects.

B. Project Budget

This project was divided into 2 separate project areas in the beginning of this report, both for ease of description and also to shown the separate funding allocations. A HUD Community Development Block Grant (HUD CDBG) is available to fund the Cobhill Area extensions, and an Appalachian Regional Commission (ARC) grant is available for funding the Phase 6 Original extensions. A Summary of the proposed funding is as follows:

	<u>Ph 6 Original</u>	<u>Cobhill Area</u>	<u>Total</u>
RD Grant	\$ 692,076	\$ 713,888	\$ 1,405,963
RD Loan	230,691	237,962	468,654
CDBG	0	985,000	985,000
ARC	450,000	0	450,000
Local Contribution	10,000	12,000	22,000
Tapping Fees	<u>41,300</u>	<u>25,900</u>	<u>67,200</u>
Total Estimated	\$ 1,424,067	\$ 1,974,750	\$ 3,398,817

C. Rate Analysis

A rate analysis along with the existing and projected operation and maintenance costs and debt service requirements in being developed and will be submitted in the Summary / Addendum. This analysis will include a statement regarding the income necessary to meet estimated obligations for both the existing and proposed system and, if required, a rate increase will be proposed.

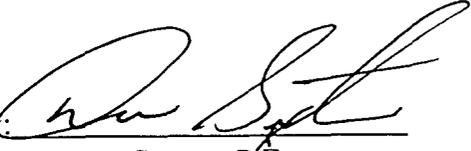
8. SUMMARY AND CONCLUSIONS

The County Water Expansion, Phase VI (includes Cobhill) Project is to consist of improvements to the existing Estill County Water District public water supply system. The improvements will make it possible to extend service to additional customers currently requesting service as money becomes available.

Recommended financing for the project is an RD loan in the amount of \$468,654 a RD grant of \$1,405,963 along with \$67,200 from tap fees.

Signed:

PEH Engineers  
620 Euclid Avenue  
P.O. Box 22738  
Lexington, Kentucky 40522

By: 

Don Sexton, P.E.

**APPENDIX**

**SUMMARY/ADDENDUM**

SUMMARY/ADDENDUM  
TO  
PRELIMINARY ENGINEERING REPORT

Dated October, 1997

FOR

Estill County Water District  
(Name of Water Facility Project)

COMBINED WATER AND SEWERAGE SYSTEM

In order to avoid unnecessary delays in application processing, the applicant and its consulting engineer should prepare a summary of the preliminary engineering report in accordance with this Guide.

Feasibility reviews and grant determinations may be processed more accurately and more rapidly if the Summary/Addendum is submitted simultaneously with the preliminary engineering report, or as soon thereafter as possible.

I. GENERAL

- A. Area to be Served: In addition to this summary, the applicant/engineer should submit a project map of the service area showing the following:
1. Existing Facilities - Location and Size.
  2. Proposed Facilities - Location and Size.
  3. New User Location - Also attach a list of new users, by road.
  4. Breakout of project cost for each branch line.



III. FACILITY CHARACTERISTICS OF EXISTING WATER SYSTEM

- A. Water Source: Describe adequacy of source (quality and quantity). Include an explanation of raw water source, raw water intake structure, treatment plant capacity, and current level of production (WTP). Also describe the adequacy of Water Purchase Contract, if applicable.

The City of Irvine (Irvine Municipal Utilities - IMU) provides an adequate treated water supply to the to the Estill County Water District (ECWD).

Cost of Purchased Water: \$ 1.45 per 1,000 gallon

- B. Water Storage:

Type: Ground Storage Tank  Elevated Tank  Standpipe   
Other

Number of Storage Structures 7

Total Storage Volume Capacity 1,001,000 gallons

Date Storage Tank(s) Constructed 1970 to present

- C. Water Distribution System:

Pipe Material PVC, and Cast Iron

Lineal Feet of Pipe: 2" 35,000 2-1/2"          3" 136,700 4" 317,250  
6" 351,450 8" 21,500 10"         

Date (s) Water Lines Constructed 1969 to present

Number and Capacity of Pump Station(s) Seven (7) Total : 1 - 200 gpm ,  
2 - 150 gpm, 1 - 120 gpm, 1 - 100 gpm, 1 - 75 gpm, 1 - 50 gpm

- D. Condition of Existing Water System:

Briefly describe the condition and suitability for continued use of facility now owned by the applicant. Include any major renovation that will be needed within five to ten years.

The existing system is in fairly good condition and well maintained.

The unaccounted for water line loss was 20% in 1996.

IV. EXISTING LONG-TERM INDEBTEDNESS

A. List Bonds and Notes:

<u>Date</u>	<u>Principal Balance</u>	<u>Interest Rate</u>	<u>Bond or Note Holder</u>	<u>Amount on Deposit in Reserve Acct</u>
1964 Issue	\$ 97,000	5%	GECC	\$
1976 Issue	\$ 253,000	5%	GECC	\$
1984 Issue	\$ 234,000	7.9%	GECC	\$
1991 Issue A	\$ 506,000	5%	RD	\$
1991 Issue B	\$ 82,000	5%	RD	\$
1991 Issue	\$ 444,000	5%	RD	\$ Total
1996 Issue	\$ 505,000	5.6 %	RD	\$ 43,794

B. Type Bond:

<u>Date</u>	<u>Water</u>	<u>Sewer</u>	<u>Water / Sewer*</u>	<u>Other</u>
19 64 Issue	X		% %	
19 76 Issue	X		% %	
19 84 Issue	X		% %	
19 91 Issue A	X		% %	
19 91 Issue B	X		% %	
19 91 Issue		X	% %	
19 96 Issue	X		% %	

\*If a combined issue, show attributable portion to each system.

V. LAND AND RIGHTS - EXISTING SYSTEM(S)

Number of Water and/or Sewer Treatment Plant Sites	1
Number of Pump Sites	7
Number of Other Sites	7
Total Acreage	Unknown
Purchase Price	\$ Unknown

VI. NUMBER OF EXISTING USERS

A. Sewer Users:

Residential (In Town)*	<u>362</u>
Residential/Farmers (Out of Town)*	<u>          </u>
Non-Residential/Commercial(In Town)	<u>75</u>
Non-Residential/Commercial(Out of Town)	<u>          </u>
Total	<u>437</u>
Number of Total Potential Users	
Living in the Service Area	<u>Unknown</u>

\*NOTE: Residential/Farmer Users: Classify by type of user regardless of quantity of water used. This classification should include those meters serving individual rural residences and farmers.

VII. CURRENT SEWER CONNECTION FEES FOR EACH SIZE WATER METER CONNECTION

<u>Meter Size</u>	<u>Connection Fees</u>	<u>Minimum Water Usage for Each Size Meter</u>
<u>5/8"x 3/4"</u>	<u>\$ *          </u>	<u>          gallons</u>
<u>3/4-Inch</u>	<u>\$ *          </u>	<u>          gallons</u>
<u>1-Inch</u>	<u>\$ *          </u>	<u>          gallons</u>
<u>1½-Inch</u>	<u>\$ *          </u>	<u>          gallons</u>
<u>2-Inch</u>	<u>\$ *          </u>	<u>          gallons</u>
<u>3-Inch</u>	<u>\$ *          </u>	<u>          gallons</u>
<u>4-Inch</u>	<u>\$ *          </u>	<u>          gallons</u>
<u>6-Inch</u>	<u>\$ *          </u>	<u>          gallons</u>

\* at actual cost

Sewer Rates (Existing System):

Percentage of water bill \_\_\_\_\_%. Minimum Charge \$\_\_\_\_\_.

Other: (Sewer charge if not based on water bill) see attached  
sewer rate schedule (Page 9).

Date this rate went into effect \_\_\_\_\_

VIII. PROPOSED OPERATING BUDGET - EXISTING SEWER SYSTEM

(1st Full Year of Operation)

Year Ending 1996

A. Operating Income: <b>0.0%</b> Annual Inflation	
Sewer Revenue	<u>\$170,614</u>
Disconnect/Reconnect/Late Charge Fees	<u>                    </u>
Other (Describe)      Miscellaneous Service Revenues	<u>                    </u>
Less Allowances and Deductions	<u>                    </u>
Total Operating Income . . . . .	<u><b>\$170,614</b></u>
B. Operation and Maintenance Expenses:	
(Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)	
Operation Expense	<u>\$32,756</u>
Pumping Expense	<u>                    </u>
Sewer Treatment Expense	<u>                    </u>
Maintenance Expense	<u>\$4,069</u>
Customer Accounts Expense	<u>                    </u>
Administrative and General Expense	<u>\$15,740</u>
Total Operating Expenses . . . . .	<u><b>\$52,565</b></u>
Net Operating Income . . . . .	<u><b>\$118,049</b></u>
C. Non-Operating Income:	
Interest on Deposits	<u>                    </u>
Other (Identify)	<u>\$1,314</u>
Total Non-Operating Income	<u><b>\$1,314</b></u>
D. Net Income . . . . .	<u><b>\$119,363</b></u>
E. Debt Repayment:	
RD Interest	<u>\$23,359</u>
RD Principal	<u>\$5,000</u>
Non-RD Interest	<u>                    </u>
Non-RD Principal	<u>                    </u>
Total Debt Repayment . . . . .	<u><b>\$28,359</b></u>
F. Balance Available for Coverage and Depreciation . . . . .	<u><b>\$91,004</b></u>
G. Required Coverage @ 20%	<u><b>\$5,672</b></u>
H. Surplus (Deficit)	<u><b>\$85,332</b></u>

IX.

## ECWD PHASE 6

ANALYSIS OF ACTUAL SEWER USAGE - INCOME - EXISTING SYSTEM - 12 MONTH PERIOD  
(January 1, 1996 to December 31, 1996)

ESTILL COUNTY WATER DISTRICT

Sep-97

Residential	Water Usage	Usage R	No. of Users R	Average	Average Rate	Income R
	0 - 1,000	298,676	544	549	\$13.00	\$7,072.00
	1,000 - 2,000	1,200,738	791	1,518	\$13.00	\$10,283.00
	2,000 - 3,000	1,936,120	776	2,495	\$16.22	\$12,584.78
	3,000 - 4,000	2,644,765	755	3,503	\$22.77	\$17,190.97
	4,000 - 5,000	2,639,309	589	4,481	\$29.13	\$17,155.51
	5,000 - 6,000	2,350,450	430	5,466	\$35.53	\$15,277.93
	6,000 - 7,000	1,308,990	203	6,448	\$41.91	\$8,508.44
	7,000 - 8,000	694,750	93	7,470	\$48.56	\$4,515.88
	8,000 - 9,000	384,270	45	8,539	\$55.51	\$2,497.76
	9,000 - 10,000	245,640	26	9,448	\$61.41	\$1,596.66
	10,000 - 11,000	219,670	21	10,460	\$67.99	\$1,427.86
	11,000 - 12,000	240,680	21	11,461	\$74.50	\$1,564.42
	12,000 - 13,000	98,140	8	12,268	\$79.74	\$637.91
	13,000 - 14,000	27,010	2	13,505	\$87.78	\$175.57
	14,000 - 15,000	42,410	3	14,137	\$91.89	\$275.67
	15,000 - 16,000	31,410	2	15,705	\$102.08	\$204.17
	16,000 - 17,000	0		16,500	\$107.25	\$0.00
	17,000 - 18,000	34,770	2	17,385	\$113.00	\$226.01
	18,000 - 19,000	55,700	3	18,567	\$120.68	\$362.05
	19,000 - 20,000	0		19,500	\$126.75	\$0.00
	20,000 - 25,000	90,400	4	22,600	\$146.90	\$587.60
	25,000 - 30,000	0		27,500	\$178.75	\$0.00
	30,000 - 35,000	34,600	1	34,600	\$224.90	\$224.90
	35,000 - 40,000	109,750	3	36,583	\$237.79	\$713.38
	40,000 - 45,000	0		42,500	\$276.25	\$0.00
	45,000 - 50,000	46,140	1	46,140	\$299.91	\$299.91
	50,000 - 55,000	155,660	3	51,887	\$337.26	\$1,011.79
	55,000 - 60,000	117,840	2	58,920	\$382.98	\$765.96
	60,000 - 65,000	124,970	2	62,485	\$406.15	\$812.31
	65,000 - 70,000	200,910	3	66,970	\$435.31	\$1,305.92
	70,000 - 75,000	73,840	1	73,840	\$479.96	\$479.96
	75,000 - 80,000	77,500	1	77,500	\$503.75	\$503.75
	80,000 - 85,000	84,670	1	84,670	\$550.36	\$550.36
	85,000 - 90,000	344,550	4	86,138	\$559.89	\$2,239.58
	90,000 - 100,000	96,300	1	96,300	\$625.95	\$625.95
	> 100,000	418,990	3	139,663	\$907.81	\$2,723.44
<b>TOTALS:</b>		<b>16,429,618</b>	<b>4,344</b>			<b>\$114,401.33</b>

IX.

## ECWD PHASE 6

ANALYSIS OF ACTUAL SEWER USAGE - INCOME - EXISTING SYSTEM - 12 MONTH PERIOD  
(January 1, 1996 to December 1, 1996)

ESTILL COUNTY WATER DISTRICT

Sep-97

Commercial	Water Usage	Usage C	No. of Users C	Average	Average Rate	Income C
	0 - 1,000	62,250	134	465	\$13.00	\$1,742.00
	1,000 - 2,000	146,432	104	1,408	\$13.00	\$1,352.00
	2,000 - 3,000	202,140	81	2,496	\$16.22	\$1,313.91
	3,000 - 4,000	266,770	74	3,605	\$23.43	\$1,734.01
	4,000 - 5,000	519,082	118	4,399	\$28.59	\$3,374.03
	5,000 - 6,000	499,478	92	5,429	\$35.29	\$3,246.61
	6,000 - 7,000	335,348	52	6,449	\$41.92	\$2,179.76
	7,000 - 8,000	296,634	39	7,606	\$49.44	\$1,928.12
	8,000 - 9,000	128,880	15	8,592	\$55.85	\$837.72
	9,000 - 10,000	161,500	17	9,500	\$61.75	\$1,049.75
	10,000 - 11,000	92,880	9	10,320	\$67.08	\$603.72
	11,000 - 12,000	139,980	12	11,665	\$75.82	\$909.87
	12,000 - 13,000	49,930	4	12,483	\$81.14	\$324.55
	13,000 - 14,000	81,120	6	13,520	\$87.88	\$527.28
	14,000 - 15,000	115,700	8	14,463	\$94.01	\$752.05
	15,000 - 16,000	33,110	2	16,555	\$107.61	\$215.22
	16,000 - 17,000	83,730	5	16,746	\$108.85	\$544.25
	17,000 - 18,000	17,620	1	17,620	\$114.53	\$114.53
	18,000 - 19,000	92,190	5	18,438	\$119.85	\$599.24
	19,000 - 20,000	115,950	6	19,325	\$125.61	\$753.68
	20,000 - 25,000	252,140	11	22,922	\$148.99	\$1,638.91
	25,000 - 30,000	27,500	1	27,500	\$178.75	\$178.75
	30,000 - 35,000	1,007,190	31	32,490	\$211.19	\$6,546.74
	35,000 - 40,000	848,210	22	38,555	\$250.61	\$5,513.37
	40,000 - 45,000	1,236,396	28	44,157	\$287.02	\$8,036.57
	45,000 - 50,000	95,106	2	47,553	\$309.09	\$618.19
	50,000 - 55,000	548,080	10	54,808	\$356.25	\$3,562.52
	55,000 - 60,000	57,500	1	57,500	\$373.75	\$373.75
	60,000 - 65,000	572,860	9	63,651	\$413.73	\$3,723.59
	65,000 - 70,000	67,555	1	67,555	\$439.11	\$439.11
	70,000 - 75,000			72,500	\$471.25	\$0.00
	75,000 - 80,000	227,620	3	75,873	\$493.18	\$1,479.53
	80,000 - 85,000	0		82,500	\$536.25	\$0.00
	85,000 - 90,000	0		87,500	\$568.75	\$0.00
	90,000 - 100,000	0		95,000	\$617.50	\$0.00
	> 100,000	127,800	1	127,800	\$830.70	\$830.70
<b>TOTALS:</b>		<b>8,153,261</b>	<b>900</b>			<b>\$56,213.29</b>

## Monthly Averages

Usage	Bill	Customers	Usage	Billings	Income	
3,782	\$24.58	362	Residential Totals	16,429,618	4,344	\$114,401.33
9,059	\$58.88	75	Commercial Totals	8,153,261	900	\$56,213.29
		437	Grand Totals	24,582,879	5,244	\$170,614.62

X. NUMBER OF EXISTING USERS

A. Water Users:

Residential (In Town)*	<u>0</u>
Residential/Farmers (Out of Town)*	<u>2405</u>
Non-Residential/Commercial(In Town)	<u>0</u>
Non-Residential/Commercial(Out/Town)	<u>100</u>
Total	<u>2505</u>
Number of <b>Phase 5</b> Residential Users	<u>146</u>
Number of Total Potential Users	
Living in the Service Area	<u>Unknown</u>

\*NOTE: Residential/Farmer Users: Classify by type of user regardless of quantity of water used. This classification should include those meters serving individual rural residences and farmers.

XI. CURRENT WATER CONNECTION FEES FOR EACH SIZE METER CONNECTION

<u>Meter Size</u>	<u>Connection Fees</u>	<u>Minimum Water Usage for Each Size Meter</u>
<u>5/8"x 3/4"</u>	<u>\$ 350</u>	<u>1,000 gallons</u>
<u>3/4-Inch</u>	<u>\$ 350</u>	<u>1,000 gallons</u>
<u>1-Inch</u>	<u>\$ 350</u>	<u>1,000 gallons</u>
<u>1½-Inch</u>	<u>\$ 350</u>	<u>1,000 gallons</u>
<u>2-Inch</u>	<u>\$ 350</u>	<u>1,000 gallons</u>
<u>3-Inch</u>	<u>\$ N/A</u>	<u>1,000 gallons</u>
<u>4-Inch</u>	<u>\$ N/A</u>	<u>1,000 gallons</u>
<u>6-Inch</u>	<u>\$ N/A</u>	<u>1,000 gallons</u>

XII. WATER RATES - EXISTING SYSTEM

Existing Rate Schedule:

First	<u>2,000</u>	Gallons @	<u>\$ 10.28</u>	Minimum.
Next	<u>3,000</u>	Gallons @	<u>\$ 4.89</u>	Per 1,000 Gallons.
Next	<u>5,000</u>	Gallons @	<u>\$ 4.74</u>	Per 1,000 Gallons.
All Over	<u>10,000</u>	Gallons @	<u>\$ 3.24</u>	Per 1,000 Gallons.

Date this rate went into effect: July 15, 1994

Minimum Bills

<u>Meter Size</u>	<u>Gallons</u>	<u>Amount</u>
5/8" x 3/4"	2,000	\$10.28
1"	5,000	\$24.95
2"	16,000	\$68.09

Bulk Loading Station \$3.52 per 1,000 gallons

Bulk Meter Sales to Powell  
County Water District \$1.91 per 1,000 gallons

Existing Sewer Rate Schedule:

	<u>User</u>	<u>Debt Service</u>	<u>Combined</u>
	<u>Charge</u>	<u>Charge</u>	<u>Rate</u>
<u>Minimum Bill</u> (2,000 gallons)	\$10.06	\$2.94	\$13.00
Charge for every 1,000 gallons	\$ 5.03	\$1.47	\$ 6.50

Form for filing Rate Schedules

For ESTILL COUNTY, KENTUCKY  
Community, Town or City

P.S.C. NO. 2

Original SHEET NO. 4

ESTILL COUNTY WATER DISTRICT NO. 1  
Name of Issuing Corporation

CANCELLING P.S.C. NO. \_\_\_\_\_

First Revised SHEET NO. \_\_\_\_\_

CLASSIFICATION OF SERVICE

		RATE PER UNIT
Monthly Rates		
First 2,000 gallons	\$ 10.18 (Minimum Bill)	
Next 3,000 gallons	4.84 per 1,000 gallons	
Next 5,000 gallons	4.69 per 1,000 gallons	
Over 10,000 gallons	3.19 per 1,000 gallons	
Minimum Bills		
<u>Meter Size</u>	<u>Gallons</u>	<u>Amount</u>
5/8 inch X 3/4 inch	2,000	\$ 10.18
1 inch	5,000	24.70
2 inch	16,000	67.29
Bulk Loading Station	\$ 3.47 per 1,000 gallons	
Bulk Water Sales to Powell County Water District	\$ 1.86 per 1,000 gallons	
Connection Charges		
5/8 X 3/4 inch	\$ 350	
All Other	Actual Cost of Installation	

DATE OF ISSUE 6/7/93

DATE EFFECTIVE 6/15/93

ISSUED BY \_\_\_\_\_  
Name of Officer

TITLE Archie McIntosh, Chairman

Issued by authority of an Order of the Public Service Commission of  
Kentucky in Case No. 93-213 dated June 25, 1993

XXX. OPERATING BUDGET - EXISTING WATER SYSTEM

(1st Full Year of Operation)

Year Ending 1996

A. Operating Income: **0.0%** Annual Inflation

Water Sales	<u>\$675,664</u>
Disconnect/Reconnect/Late Charge Fees	<u>\$4,800</u>
Other (Describe)	<u>          </u>
Less Allowances and Deductions	<u>          </u>
Total Operating Income .....	<u><b>\$680,464</b></u>

B. Operation and Maintenance Expenses:  
(Based on Uniform System of Accounts prescribed by  
National Association of Regulatory Utility Commissioners)

Source of Supply Expense	<u>\$297,412</u>
Pumping Expense	<u>\$115,000</u>
Water Treatment Expense	<u>\$0</u>
Transmission and Distribution Expense	<u>\$15,415</u>
Customer Accounts Expense	<u>\$23,928</u>
Administrative and General Expense	<u>\$52,929</u>
Total Operating Expenses .....	<u><b>\$504,684</b></u>
Net Operating Income .....	<u><b>\$175,780</b></u>

C. Non-Operating Income:

Interest on Deposits	<u>\$10,000</u>
Other (Identify)	<u>\$0</u>
Total Non-Operating Income	<u><b>\$10,000</b></u>

D. Net Income .....

**\$185,780**

E. Debt Repayment:

RD Interest	<u>          </u>
RD Principal	<u>          </u>
Non-RD Interest	<u>          </u>
Non-RD Principal	<u>          </u>
Total Debt Repayment .....	<u><b>\$88,808</b></u>

F. Balance Available for Coverage and  
Depreciation .....

**\$96,972**

G. Required Coverage @ 20%

**\$17,762**

H. Surplus (Deficit) .....

**\$79,211**

**ECWD PHASE 6**  
**ANALYSIS OF ACTUAL WATER USAGE - INCOME - EXISTING SYSTEM - 12 MONTH PERIOD**  
 (January 1, 1996 to December 31, 1996)

ESTILL COUNTY WATER DISTRICT

Sep-97

Meter Size	Water Usage		Usage		Total Usage	No. of Users		Average	Average Rate	Income	
			R	C		R	C			R	C
5/8" x 3/4"	-	1,000	1,151,854	136,202	1,288,056	2,554	302	451	\$10.28	\$26,255.12	\$3,104.56
	1,000 -	2,000	8,119,792	336,160	8,455,952	5,314	220	1,528	\$10.28	\$54,627.92	\$2,261.60
	2,000 -	3,000	11,202,954	283,969	11,486,923	4,458	113	2,513	\$12.79	\$57,017.82	\$1,445.27
	3,000 -	4,000	16,722,654	255,880	16,978,534	4,782	72	3,498	\$17.60	\$84,163.20	\$1,267.20
	4,000 -	5,000	17,979,170	309,080	18,288,250	4,015	70	4,478	\$22.40	\$89,936.00	\$1,568.00
	5,000 -	6,000	14,000,640	278,919	14,279,559	2,560	51	5,469	\$27.17	\$69,555.20	\$1,385.67
	6,000 -	7,000	11,505,460	179,470	11,684,930	1,779	28	6,466	\$31.90	\$56,750.10	\$893.20
	7,000 -	8,000	8,972,080	156,786	9,128,866	1,202	21	7,464	\$36.63	\$44,029.26	\$769.23
	8,000 -	9,000	5,558,288	127,870	5,686,158	656	15	8,474	\$41.42	\$27,171.52	\$621.30
	9,000 -	10,000	3,833,336	180,728	4,014,064	403	19	9,512	\$46.34	\$18,675.02	\$680.46
	10,000 -	11,000	2,895,060	104,500	2,999,560	274	10	10,562	\$50.47	\$13,828.78	\$504.70
	11,000 -	12,000	2,280,500	115,660	2,396,160	197	10	11,576	\$53.76	\$10,590.72	\$537.60
	12,000 -	13,000	1,459,260	86,940	1,546,200	117	7	12,469	\$56.65	\$6,628.05	\$396.55
	13,000 -	14,000	1,168,480	121,440	1,289,920	86	9	13,578	\$60.24	\$5,180.64	\$542.16
	14,000 -	15,000	997,480	143,650	1,141,130	69	10	14,445	\$63.05	\$4,350.45	\$630.50
	15,000 -	16,000	928,070	78,660	1,006,730	60	5	15,488	\$66.43	\$3,985.80	\$332.15
	16,000 -	17,000	561,850	116,230	678,080	34	7	16,539	\$69.83	\$2,374.22	\$488.81
	17,000 -	18,000	420,650	70,230	490,880	24	4	17,531	\$73.05	\$1,753.20	\$292.20
	18,000 -	19,000	480,920	73,510	554,430	26	4	18,481	\$76.13	\$1,979.38	\$304.52
	19,000 -	20,000	412,870	115,970	528,840	21	6	19,687	\$79.71	\$1,673.91	\$478.26
	20,000 -	25,000	1,127,530	393,940	1,521,470	51	18	22,050	\$87.69	\$4,472.19	\$1,578.42
	25,000 -	30,000	743,460	330,820	1,074,280	27	12	27,546	\$105.50	\$2,648.60	\$1,268.00
	30,000 -	35,000	256,700	196,830	453,530	8	6	32,395	\$121.21	\$969.68	\$727.26
	35,000 -	40,000	343,386	421,050	764,436	9	11	38,222	\$140.09	\$1,260.81	\$1,540.99
	40,000 -	45,000	166,320	165,980	332,300	4	4	41,538	\$150.83	\$603.32	\$603.32
	45,000 -	50,000	147,050	47,500	194,550	3	1	48,638	\$173.84	\$521.52	\$173.84
	50,000 -	55,000	408,420		408,420	8		51,053	\$181.66	\$1,453.28	\$0.00
	55,000 -	60,000	169,980		169,980	3		56,600	\$199.83	\$599.49	\$0.00
	60,000 -	65,000	184,420		184,420	3		51,053	\$215.42	\$646.26	\$0.00
	65,000 -	70,000	135,990		135,990	2		56,600	\$236.55	\$473.10	\$0.00
70,000 -	75,000	70,620		70,620	1		70,620	\$245.06	\$245.06	\$0.00	
75,000 -	80,000	77,500		77,500	1		77,500	\$267.35	\$267.35	\$267.35	
80,000 -	200,000	605,470	2,879,730	3,485,200	4	18	159,985	\$534.60	\$2,138.40	\$9,622.80	
200,000 -	1,000,000		2,344,000	2,344,000		10	234,400	\$775.71	\$0.00	\$7,757.10	
<b>Subtotal</b>			<b>115,088,214</b>	<b>10,129,204</b>	<b>125,217,418</b>	<b>28,755</b>	<b>1,064</b>			<b>\$597,025.27</b>	<b>\$42,241.02</b>
<b>Average Monthly Bill</b>										<b>\$20.76</b>	<b>\$39.70</b>
<b>Average Monthly Usage</b>			<b>4,002</b>	<b>9,520</b>							

Meter Size	Water Usage		Usage		Total Usage	No. of Users		Average	Average Rate	Income	
			R	C		R	C			R	C
1"	-	1,000	1,623		1,623	3		451	\$10.28	\$30.84	\$0.00
	1,000 -	2,000		10,980	10,980		8	1,373	\$10.28	\$0.00	\$82.24
	2,000 -	3,000		6,630	6,630		3	2,210	\$11.31	\$0.00	\$33.93
	3,000 -	12,000		11,160	11,160		1	11,160	\$52.41	\$0.00	\$52.41
	12,000 -	13,000	12,250		12,250	1		12,250	\$55.94	\$55.94	\$0.00
	13,000 -	25,000	44,250		44,250	2		22,125	\$87.94	\$175.88	\$0.00
	25,000 -	30,000	56,160	25,860	82,020	2	1	27,340	\$104.83	\$209.66	\$104.83
	30,000 -	35,000	96,810	165,670	262,480	3	5	32,810	\$122.55	\$367.65	\$612.75
	35,000 -	40,000	296,140	149,364	445,504	8	4	37,125	\$136.54	\$1,092.32	\$546.16
	40,000 -	45,000		169,370	169,370		4	42,343	\$153.44	\$0.00	\$613.76
	45,000 -	50,000	94,110	286,320	380,430	2	6	47,554	\$170.32	\$340.64	\$1,021.92
	50,000 -	55,000	259,720	104,250	363,970	5	2	51,996	\$184.72	\$923.60	\$369.44
	55,000 -	60,000	234,640	289,330	523,970	4	5	58,219	\$204.88	\$819.52	\$1,024.40
	60,000 -	65,000	185,480	440,060	625,540	3	7	62,554	\$218.92	\$656.76	\$1,532.44
	65,000 -	70,000	133,780		133,780	2		66,890	\$232.97	\$465.94	\$0.00
	70,000 -	75,000	185,480		185,480	2		72,575	\$251.39	\$502.78	\$0.00
	75,000 -	80,000		157,020	157,020		2	78,510	\$270.62	\$0.00	\$541.24
	80,000 -	85,000	84,670		84,670	1		84,670	\$290.58	\$290.58	\$0.00
	85,000 -	90,000	344,550		344,550	4		86,138	\$295.34	\$1,181.36	\$0.00
	90,000 -	100,000	96,300		96,300	1		96,300	\$328.26	\$328.26	\$0.00
100,000 -	200,000	254,340		254,340	2		127,170	\$428.28	\$856.56	\$0.00	
<b>Subtotal</b>			<b>2,380,303</b>	<b>1,816,014</b>	<b>4,196,317</b>	<b>45</b>	<b>48</b>			<b>\$8,298.29</b>	<b>\$6,535.52</b>
<b>Average Monthly Bill</b>										<b>\$184.41</b>	<b>\$136.16</b>
<b>Average Monthly Usage</b>			<b>52,896</b>	<b>37,834</b>							

**ECWD PHASE 6**  
**ANALYSIS OF ACTUAL WATER USAGE - INCOME - EXISTING SYSTEM - 12 MONTH PERIOD**  
 (January 1, 1996 to December 31, 1996)

ESTILL COUNTY WATER DISTRICT

Sep-97

Meter Size	Water Usage	Total Usage		Total Usage	No. of Users		Average	Average Rate	Income	
		R	C		R	C			R	C
2"	- 1,000	4,570		4,570	9		508	\$10.28	\$92.52	\$0.00
	1,000 - 2,000	4,500		4,500	3		1,500	\$10.28	\$30.84	\$0.00
	2,000 - 3,000	2,500		2,500	1		2,500	\$12.73	\$12.73	\$0.00
	3,000 - 4,000	10,300	3,800	14,100	3	1	3,525	\$17.74	\$53.22	\$17.74
	4,000 - 5,000	9,200	9,900	19,100	2	2	4,775	\$23.85	\$47.70	\$47.70
	5,000 - 6,000	38,200	10,400	48,600	7	2	5,400	\$26.85	\$187.95	\$59.70
	6,000 - 7,000	32,390	25,912	58,302	5	4	6,478	\$31.96	\$159.80	\$127.84
	7,000 - 8,000	30,600	37,600	68,100	4	5	7,567	\$37.12	\$148.48	\$185.60
	8,000 - 9,000	17,000	16,900	33,900	2	2	8,475	\$41.42	\$82.84	\$82.84
	9,000 - 10,000	9,400	9,400	18,800	1	1	9,400	\$45.81	\$0.00	\$45.81
	10,000 - 12,000	22,700	23,700	46,400	2	2	11,600	\$53.83	\$107.66	\$107.66
	12,000 - 13,000	12,400	12,400	24,800	1	1	12,400	\$56.43	\$0.00	\$56.43
	13,000 - 14,000	13,650	13,650	27,300	1	1	13,650	\$60.48	\$60.48	\$60.48
	14,000 - 15,000	14,500	14,500	29,000	1	1	14,500	\$63.23	\$63.23	\$0.00
	15,000 - 16,000	16,000	16,000	32,000	1	1	16,000	\$68.09	\$0.00	\$68.09
	16,000 - 17,000	16,900	16,900	33,800	1	1	16,900	\$71.01	\$0.00	\$71.01
	17,000 - 18,000	34,500	34,500	69,000	2	2	17,250	\$72.14	\$144.28	\$0.00
	18,000 - 19,000	36,600	18,800	55,400	2	1	18,467	\$76.08	\$152.16	\$76.08
	19,000 - 25,000	115,530	162,600	278,130	5	7	23,178	\$91.35	\$456.75	\$639.45
	25,000 - 30,000	54,800	195,500	250,300	2	7	27,811	\$106.36	\$212.72	\$744.52
30,000 - 35,000	422,800	422,800	845,600	13	13	32,523	\$121.62	\$0.00	\$1,581.06	
35,000 - 40,000	38,227	229,542	267,769	1	5	38,253	\$140.19	\$140.19	\$841.14	
40,000 - 45,000	253,680	253,680	507,360	6	6	42,280	\$153.24	\$0.00	\$919.44	
45,000 - 50,000	140,200	140,100	280,300	3	3	46,717	\$167.61	\$502.83	\$502.83	
50,000 - 55,000	154,500	154,500	309,000	3	3	51,500	\$183.11	\$0.00	\$549.33	
55,000 - 65,000	63,000	63,000	126,000	1	1	63,000	\$220.37	\$0.00	\$220.37	
65,000 - 70,000	69,800	69,800	139,600	1	1	69,800	\$242.40	\$0.00	\$242.40	
70,000 - 75,000	70,600	70,600	141,200	1	1	70,600	\$244.99	\$0.00	\$244.99	
75,000 - 200,000	418,300	1,394,330	1,812,630	3	10	139,433	\$468.01	\$1,404.03	\$4,680.10	
200,000 - 1,000,000	429,800	1,074,500	1,504,300	2	5	214,900	\$712.53	\$1,425.06	\$3,562.65	
<b>Subtotal</b>		<b>1,467,967</b>	<b>4,446,314</b>	<b>5,914,281</b>	<b>60</b>	<b>87</b>			<b>\$5,485.47</b>	<b>\$15,729.26</b>
<b>Average Monthly Bill</b>									<b>\$91.42</b>	<b>\$180.80</b>
<b>Average Monthly Usage</b>		<b>24,466</b>	<b>51,107</b>							

Meter Size	Water Usage	Total Usage		Total Usage	No. of Users		Average	Average Rate	Income	
		R	C		R	C			R	C
3" Powell Valley	- 40000							\$10.28	\$0.00	\$0.00
	40000 - 200000		237,000	237,000	1		237,000	\$350.00	\$0.00	\$350.00
	200000 - 1000000								\$0.00	\$0.00
<b>Subtotal</b>		<b>0</b>	<b>237,000</b>	<b>237,000</b>	<b>0</b>	<b>1</b>			<b>\$0.00</b>	<b>\$350.00</b>
<b>Average Monthly Bill</b>									<b>\$0.00</b>	<b>\$350.00</b>
<b>Average Monthly Usage</b>		<b>0</b>	<b>237,000</b>							

	Total Usage		Total Usage	No. of Users		Average	Average Rate	Income	
	R	C		R	C			R	C
<b>Subtotals</b>	<b>118,936,484</b>	<b>16,628,532</b>	<b>135,565,016</b>	<b>28,860</b>	<b>1,200</b>			<b>\$610,809.03</b>	<b>\$64,855.80</b>
<b>TOTALS</b>		<b>135,565,016</b>			<b>30,060</b>				<b>\$675,664.83</b>

XV. FACILITY CHARACTERISTICS OF PROPOSED SEWER SYSTEM

A. Sewage Treatment:

1. Type \_\_\_\_\_
2. Method of Sludge Disposal \_\_\_\_\_
3. Cost per 1,000 gallons if sewage treatment is contracted:  
\$ \_\_\_\_\_
4. Date Constructed \_\_\_\_\_

B. Treatment Capacity of Sewage Treatment Plant \_\_\_\_\_

C. Type of Sewage Collector System (Describe) \_\_\_\_\_

D. Number and Capacity of Sewage Lift Stations \_\_\_\_\_

E. Sewage Collection System:

Lineal Feet of Collector Lines, by size: 6" \_\_\_\_\_, 8" \_\_\_\_\_,  
10" \_\_\_\_\_, 12" \_\_\_\_\_, Larger \_\_\_\_\_

XVI. LAND AND RIGHTS - PROPOSED SEWER SYSTEM

Number of Treatment Plant Sites \_\_\_\_\_  
Number of Pump Sites \_\_\_\_\_  
Number of Other Sites \_\_\_\_\_  
Total Acreage \_\_\_\_\_  
Purchase Price \$ \_\_\_\_\_

XVII. FACILITY CHARACTERISTICS OF PROPOSED WATER SYSTEM

- A. Water Source: Describe adequacy of source (quality and quantity). Include an explanation of raw water source, raw water intake structure, treatment plant capacity, and current level of production (WTP). Also describe the adequacy of Water Purchase Contract if applicable.

The Estill County Water District will continue to purchase its water from the City of Irvine at the rates listed on Page 2 of this Summary/Addendum.

- B. Water Storage:

Type: Ground Storage Tank \_\_\_ Elevated Tank \_\_\_ Standpipe X  
Other \_\_\_

Number of Storage Structures 2

Total Storage Volume Capacity 160,000 gallons

- C. Water Distribution System:

Pipe Material PVC & Ductile Iron

Lineal Feet of Pipe: 2" Diameter 0 3" 35,000 4" 135,580 6" 95,600  
8" 1,450 10" 0 12" 0

Number and Capacity of Pump Station(s) Three (3) Total : 1 Pump Station renovation, 1 - 200 gmp, 1 - 100 gpm

XVIII. LAND AND RIGHTS - PROPOSED WATER SYSTEM

Number of Treatment Plant Sites	<u>0</u>
Number of Pump Sites	<u>2</u>
Number of Tank Sites	<u>2</u>
Total Acreage	<u>3.0</u>
Purchase Price	<u>\$ 30,000</u>

XIX. NUMBER OF NEW SEWER USERS

Residential (In Town)\* \_\_\_\_\_  
 Residential/Farmers (Out of Town)\* \_\_\_\_\_  
 Non-Residential/Commercial(In Town) \_\_\_\_\_  
 Non-Residential/Commercial(Out of Town) \_\_\_\_\_  
 Total \_\_\_\_\_  
 Number of Total Potential Users \_\_\_\_\_  
 Living in the Service Area \_\_\_\_\_

\*NOTE: Residential/Farmer Users: Classify by type of user regardless of quantity of water used. This classification should include those meters serving individual rural residences and farmers.

XX. PROPOSED SEWER CONNECTION FEES FOR EACH SIZE WATER METER CONNECTION

<u>Meter Size</u>	<u>Connection Fees</u>	<u>Minimum Water Usage for Each Size Meter</u>
<u>5/8"x 3/4"</u>	\$ _____	_____ gallons
<u>3/4-Inch</u>	\$ _____	_____ gallons
<u>1-Inch</u>	\$ _____	_____ gallons
<u>1½-Inch</u>	\$ _____	_____ gallons
<u>2-Inch</u>	\$ _____	_____ gallons
<u>3-Inch</u>	\$ _____	_____ gallons
<u>4-Inch</u>	\$ _____	_____ gallons
<u>6-Inch</u>	\$ _____	_____ gallons

XXI. NUMBER OF NEW WATER USERS

A. Water Users:

Residential (In Town)*	<u>0</u>
Residential/Farmers (Out of Town)*	<u>          </u>
Phase 6 Original	<u>148</u>
Cobhill Area	<u>207</u>
Non-Residential/Commercial(In Town)	<u>0</u>
Non-Residential/Commercial(Out/Town)	<u>0</u>
Total	<u>355</u>
Number of Total Potential Users Living in the Service Area	<u>Unknown</u>

\*NOTE: Residential/Farmer Users: Classify by type of user regardless of quantity of water used. This classification should include those meters serving individual rural residences and farmers.

XXII. PROPOSED WATER CONNECTION FEES FOR EACH SIZE METER CONNECTION

<u>Meter Size</u>	<u>Connection Fees</u>	<u>Minimum Water Usage for Each Size Meter</u>
<u>5/8"x 3/4"</u>	\$ <u>  *</u>	<u>          </u> gallons
<u>3/4-Inch</u>	\$ <u>          </u>	<u>          </u> gallons
<u>1-Inch</u>	\$ <u>          </u>	<u>          </u> gallons
<u>1½-Inch</u>	\$ <u>          </u>	<u>          </u> gallons
<u>2-Inch</u>	\$ <u>          </u>	<u>          </u> gallons
<u>3-Inch</u>	\$ <u>          </u>	<u>          </u> gallons
<u>4-Inch</u>	\$ <u>          </u>	<u>          </u> gallons
<u>6-Inch</u>	\$ <u>          </u>	<u>          </u> gallons

\* Unchanged, see page 6 of this Summary/Addendum.

XXIII. SEWER RATES - PROPOSED

A. Proposed Rate Schedule without RD Grant:

Percentage of water bill \_\_\_\_\_%. Minimum Charge \$\_\_\_\_\_.

Other (If charge not based on water bill)\_\_\_\_\_

Proposed Rate Schedule: (Without RD Grant)

First _____	Gallons @ \$ _____	Minimum.
Next _____	Gallons @ \$ _____	Per 1,000 Gallons.
Next _____	Gallons @ \$ _____	Per 1,000 Gallons.
Next _____	Gallons @ \$ _____	Per 1,000 Gallons.
Next _____	Gallons @ \$ _____	Per 1,000 Gallons.
Next _____	Gallons @ \$ _____	Per 1,000 Gallons.
Over _____	Gallons @ \$ _____	Per 1,000 Gallons.

The above proposed rate, without RD grant, must be completed for each grant. If the applicant/engineer desires, there is no objection to recommending a proposed rate with an estimated RD grant in the Table below. However, the preparer should remember that the Table (A) above must be completed prior to Table (B).

B. Recommended Rate Schedule with RD Grant:

Percentage of water bill \_\_\_\_\_%. Minimum Charge \$\_\_\_\_\_.

Other (If charge not based on water bill)\_\_\_\_\_

Recommended Rate Schedule: (With RD Grant)

First _____	Gallons @ \$ _____	Minimum.
Next _____	Gallons @ \$ _____	Per 1,000 Gallons.
Next _____	Gallons @ \$ _____	Per 1,000 Gallons.
Next _____	Gallons @ \$ _____	Per 1,000 Gallons.
Next _____	Gallons @ \$ _____	Per 1,000 Gallons.
Next _____	Gallons @ \$ _____	Per 1,000 Gallons.
Over _____	Gallons @ \$ _____	Per 1,000 Gallons.

If more than one rate, use additional sheets.

XXIV. WATER RATES - PROPOSED SYSTEM

Funding Options:

Projected rates are separated between the Existing & Phase 6 Original portion and the Cobhill portion.

1. RD Loan Only (\$3,275,667 @ 5%)
2. RD Loan (\$2,324,617 @ 5%) & CDBG (\$985,000)
3. RD Loan (\$1,162,308 @ 5%), RD Grant 50% (\$1,162,309) & CDBG (\$985,000)
4. RD Loan (\$937,308 @ %5), RD Grant (\$937,309), ARC Grant (\$450,000) & CDBG (\$985,000)
5. RD Loan (\$468,654 @ 5%), RD Grant 75% (\$1,405,963), ARC Grant (\$450,000) & CDBG (\$985,000)

A. Funding Option 1 - Proposed Rate Schedule

		Exist. & Ph 6		
		Original	Cobhill	
First	<u>2,000</u> Gallons @ \$ <u>10.90</u>		\$ <u>41.74</u>	Minimum.
Next	<u>3,000</u> Gallons @ \$ <u>5.18</u>		\$ <u>19.85</u>	Per 1,000 Gallons.
Next	<u>5,000</u> Gallons @ \$ <u>5.02</u>		\$ <u>19.24</u>	Per 1,000 Gallons.
Next	_____ Gallons @ \$ _____		\$ _____	Per 1,000 Gallons.
Next	_____ Gallons @ \$ _____		\$ _____	Per 1,000 Gallons.
Next	_____ Gallons @ \$ _____		\$ _____	Per 1,000 Gallons.
Over	<u>10,000</u> Gallons @ \$ <u>3.43</u>		\$ <u>13.15</u>	Per 1,000 Gallons.

Funding Option 2 - Proposed Rate Schedule

		Exist. & Ph 6		
		Original	Cobhill	
First	<u>2,000</u> Gallons @ \$ <u>10.90</u>		\$ <u>25.19</u>	Minimum.
Next	<u>3,000</u> Gallons @ \$ <u>5.18</u>		\$ <u>11.98</u>	Per 1,000 Gallons.
Next	<u>5,000</u> Gallons @ \$ <u>5.02</u>		\$ <u>11.61</u>	Per 1,000 Gallons.
Next	_____ Gallons @ \$ _____		\$ _____	Per 1,000 Gallons.
Next	_____ Gallons @ \$ _____		\$ _____	Per 1,000 Gallons.
Next	_____ Gallons @ \$ _____		\$ _____	Per 1,000 Gallons.
Over	<u>10,000</u> Gallons @ \$ <u>3.43</u>		\$ <u>7.93</u>	Per 1,000 Gallons.

The above proposed rate without RD grant must be completed for each grant.

If the applicant/engineer desires, there is no objection to recommending a proposed rate with an estimated RD grant in the table below. However, the preparer should remember that Table "A" above must be completed prior to Table "B" below.

B. Funding Option 3 - Proposed Rate Schedule

		Exist. & Ph 6		
		Original	Cobhill	
First	<u>2,000</u> Gallons @ \$ <u>10.28</u>		\$ <u>16.96</u>	Minimum.
Next	<u>3,000</u> Gallons @ \$ <u>4.89</u>		\$ <u>8.07</u>	Per 1,000 Gallons.
Next	<u>5,000</u> Gallons @ \$ <u>4.74</u>		\$ <u>7.82</u>	Per 1,000 Gallons.
Next	_____ Gallons @ \$ _____		\$ _____	Per 1,000 Gallons.
Next	_____ Gallons @ \$ _____		\$ _____	Per 1,000 Gallons.
Next	_____ Gallons @ \$ _____		\$ _____	Per 1,000 Gallons.
Over	<u>10,000</u> Gallons @ \$ <u>3.24</u>		\$ <u>5.81</u>	Per 1,000 Gallons.

Funding Option 4 - Proposed Rate Schedule

		Exist. & Ph 6		
		Original	Cobhill	
First	<u>2,000</u> Gallons @ \$ <u>10.28</u>		\$ <u>16.96</u>	Minimum.
Next	<u>3,000</u> Gallons @ \$ <u>4.89</u>		\$ <u>8.07</u>	Per 1,000 Gallons.
Next	<u>5,000</u> Gallons @ \$ <u>4.74</u>		\$ <u>7.82</u>	Per 1,000 Gallons.
Next	_____ Gallons @ \$ _____		\$ _____	Per 1,000 Gallons.
Next	_____ Gallons @ \$ _____		\$ _____	Per 1,000 Gallons.
Next	_____ Gallons @ \$ _____		\$ _____	Per 1,000 Gallons.
Over	<u>10,000</u> Gallons @ \$ <u>3.24</u>		\$ <u>5.81</u>	Per 1,000 Gallons.

Funding Option 5 - Recommended Rate Schedule

		Exist. & Ph 6		
		Original	Cobhill	
First	<u>2,000</u> Gallons @ \$ <u>10.28</u>		\$ <u>12.96</u>	Minimum.
Next	<u>3,000</u> Gallons @ \$ <u>4.89</u>		\$ <u>6.06</u>	Per 1,000 Gallons.
Next	<u>5,000</u> Gallons @ \$ <u>4.74</u>		\$ <u>5.88</u>	Per 1,000 Gallons.
Next	_____ Gallons @ \$ _____		\$ _____	Per 1,000 Gallons.
Next	_____ Gallons @ \$ _____		\$ _____	Per 1,000 Gallons.
Next	_____ Gallons @ \$ _____		\$ _____	Per 1,000 Gallons.
Over	<u>10,000</u> Gallons @ \$ <u>3.24</u>		\$ <u>4.02</u>	Per 1,000 Gallons.

If more than one rate, use additional sheets.

XXV. PROPOSED OPERATING BUDGET - EXISTING SEWER SYSTEM	
(1st Full Year of Operation)	Year Ending <u>1998</u>
A. Operating Income: <b>3.0%</b> Annual Inflation	
Sewer Revenue	<u>\$181,150</u>
Disconnect/Reconnect/Late Charge Fees	<u>                    </u>
Other (Describe)      Miscellaneous Service Revenues	<u>                    </u>
Less Allowances and Deductions	<u>                    </u>
Total Operating Income	<u><b>\$181,150</b></u>
B. Operation and Maintenance Expenses:	
(Based on Uniform System of Accounts prescribed by	
National Association of Regulatory Utility Commissioners)	
Operation Expense	<u>\$34,721</u>
Pumping Expense	<u>                    </u>
Sewer Treatment Expense	<u>                    </u>
Maintenance Expense	<u>\$4,313</u>
Customer Accounts Expense	<u>                    </u>
Administrative and General Expense	<u>\$16,685</u>
Total Operating Expenses	<u><b>\$55,719</b></u>
Net Operating Income	<u><b>\$125,431</b></u>
C. Non-Operating Income:	
Interest on Deposits	<u>                    </u>
Other (Identify)	<u>\$1,800</u>
Total Non-Operating Income	<u><b>\$1,800</b></u>
D. Net Income	<u><b>\$127,231</b></u>
E. Debt Repayment:	
RD Interest	<u>\$23,359</u>
RD Principal	<u>\$5,000</u>
Non-RD Interest	<u>                    </u>
Non-RD Principal	<u>                    </u>
Total Debt Repayment	<u><b>\$28,359</b></u>
F. Balance Available for Coverage and Depreciation	<u><b>\$98,872</b></u>
G. Required Coverage @ 20%	<u><b>\$5,672</b></u>
H. Surplus (Deficit)	<u><b>\$93,200</b></u>

XXVI.

## ECWD PHASE 6

ANALYSIS OF ACTUAL SEWER USAGE - INCOME - EXISTING SYSTEM - 12 MONTH PERIOD  
(January 1, 1998 to December 31, 1998)

ESTILL COUNTY WATER DISTRICT

Sep-97

Residenti	Water Usage	Usage R	o. of Users R	Average	Average Rate	Income R	
	0 -	1,000	298,676	544	549	\$13.00	\$7,072.00
	1,000 -	2,000	1,200,738	791	1,518	\$13.00	\$10,283.00
	2,000 -	3,000	1,936,120	776	2,495	\$16.22	\$12,584.78
	3,000 -	4,000	3,355,874	958	3,503	\$22.77	\$21,813.18
	4,000 -	5,000	3,548,952	792	4,481	\$29.13	\$23,068.19
	5,000 -	6,000	2,350,450	430	5,466	\$35.53	\$15,277.93
	6,000 -	7,000	1,308,990	203	6,448	\$41.91	\$8,508.44
	7,000 -	8,000	694,750	93	7,470	\$48.56	\$4,515.88
	8,000 -	9,000	384,270	45	8,539	\$55.51	\$2,497.76
	9,000 -	10,000	245,640	26	9,448	\$61.41	\$1,596.66
	10,000 -	11,000	219,670	21	10,460	\$67.99	\$1,427.86
	11,000 -	12,000	240,680	21	11,461	\$74.50	\$1,564.42
	12,000 -	13,000	98,140	8	12,268	\$79.74	\$637.91
	13,000 -	14,000	27,010	2	13,505	\$87.78	\$175.57
	14,000 -	15,000	42,410	3	14,137	\$91.89	\$275.67
	15,000 -	16,000	31,410	2	15,705	\$102.08	\$204.17
	16,000 -	17,000	0		16,500	\$107.25	\$0.00
	17,000 -	18,000	34,770	2	17,385	\$113.00	\$226.01
	18,000 -	19,000	55,700	3	18,567	\$120.68	\$362.05
	19,000 -	20,000	0		19,500	\$126.75	\$0.00
	20,000 -	25,000	90,400	4	22,600	\$146.90	\$587.60
	25,000 -	30,000	0		27,500	\$178.75	\$0.00
	30,000 -	35,000	34,600	1	34,600	\$224.90	\$224.90
	35,000 -	40,000	109,750	3	36,583	\$237.79	\$713.38
	40,000 -	45,000	0		42,500	\$276.25	\$0.00
	45,000 -	50,000	46,140	1	46,140	\$299.91	\$299.91
	50,000 -	55,000	155,660	3	51,887	\$337.26	\$1,011.79
	55,000 -	60,000	117,840	2	58,920	\$382.98	\$765.96
	60,000 -	65,000	124,970	2	62,485	\$406.15	\$812.31
	65,000 -	70,000	200,910	3	66,970	\$435.31	\$1,305.92
	70,000 -	75,000	73,840	1	73,840	\$479.96	\$479.96
	75,000 -	80,000	77,500	1	77,500	\$503.75	\$503.75
	80,000 -	85,000	84,670	1	84,670	\$550.36	\$550.36
	85,000 -	90,000	344,550	4	86,138	\$559.89	\$2,239.58
	90,000 -	100,000	96,300	1	96,300	\$625.95	\$625.95
	>	100,000	418,990	3	139,663	\$907.81	\$2,723.44
<b>TOTALS:</b>			<b>18,050,370</b>	<b>4,750</b>			<b>\$124,936.21</b>

XXVI.

ECWD PHASE 6

ANALYSIS OF ACTUAL SEWER USAGE - INCOME - EXISTING SYSTEM - 12 MONTH PERIOD  
(January 1, 1998 to December 1, 1998)

ESTILL COUNTY WATER DISTRICT

Sep-97

Commercial	Water Usage	Usage C	No. of Users C	Average	Average Rate	Income C	
	0	1,000	62,250	134	465	\$13.00	\$1,742.00
	1,000	2,000	146,432	104	1,408	\$13.00	\$1,352.00
	2,000	3,000	202,140	81	2,496	\$16.22	\$1,313.91
	3,000	4,000	266,770	74	3,605	\$23.43	\$1,734.01
	4,000	5,000	519,082	118	4,399	\$28.59	\$3,374.03
	5,000	6,000	499,478	92	5,429	\$35.29	\$3,246.61
	6,000	7,000	335,348	52	6,449	\$41.92	\$2,179.76
	7,000	8,000	296,634	39	7,606	\$49.44	\$1,928.12
	8,000	9,000	128,880	15	8,592	\$55.85	\$837.72
	9,000	10,000	161,500	17	9,500	\$61.75	\$1,049.75
	10,000	11,000	92,880	9	10,320	\$67.08	\$603.72
	11,000	12,000	139,980	12	11,665	\$75.82	\$909.87
	12,000	13,000	49,930	4	12,483	\$81.14	\$324.55
	13,000	14,000	81,120	6	13,520	\$87.88	\$527.28
	14,000	15,000	115,700	8	14,463	\$94.01	\$752.05
	15,000	16,000	33,110	2	16,555	\$107.61	\$215.22
	16,000	17,000	83,730	5	16,746	\$108.85	\$544.25
	17,000	18,000	17,620	1	17,620	\$114.53	\$114.53
	18,000	19,000	92,190	5	18,438	\$119.85	\$599.24
	19,000	20,000	115,950	6	19,325	\$125.61	\$753.68
	20,000	25,000	252,140	11	22,922	\$148.99	\$1,638.91
	25,000	30,000	27,500	1	27,500	\$178.75	\$178.75
	30,000	35,000	1,007,190	31	32,490	\$211.19	\$6,546.74
	35,000	40,000	848,210	22	38,555	\$250.61	\$5,513.37
	40,000	45,000	1,236,396	28	44,157	\$287.02	\$8,036.57
	45,000	50,000	95,106	2	47,553	\$309.09	\$618.19
	50,000	55,000	548,080	10	54,808	\$356.25	\$3,562.52
	55,000	60,000	57,500	1	57,500	\$373.75	\$373.75
	60,000	65,000	572,860	9	63,651	\$413.73	\$3,723.59
	65,000	70,000	67,555	1	67,555	\$439.11	\$439.11
	70,000	75,000			72,500	\$471.25	\$0.00
	75,000	80,000	227,620	3	75,873	\$493.18	\$1,479.53
	80,000	85,000	0		82,500	\$536.25	\$0.00
	85,000	90,000	0		87,500	\$568.75	\$0.00
	90,000	100,000	0		95,000	\$617.50	\$0.00
	>	100,000	127,800	1	127,800	\$830.70	\$830.70
<b>TOTALS:</b>		<b>8,153,261</b>	<b>900</b>			<b>\$56,213.29</b>	

Monthly Averages

Usage	Bill	Customer	Usage	Billings	Income	
3,800	\$24.70	396	<b>Residential Totals</b>	<b>18,050,370</b>	<b>4,750</b>	<b>\$124,936.21</b>
9,059	\$58.88	75	<b>Commercial Totals</b>	<b>8,153,261</b>	<b>900</b>	<b>\$56,213.29</b>
		471	<b>Grand Totals</b>	<b>26,203,631</b>	<b>5,650</b>	<b>\$181,149.51</b>

XXVII. PROPOSED OPERATING BUDGET - EXISTING WATER SYSTEM - EXISTING USE  
 (1st Full Year of Operation) Year Ending 1998

A. Operating Income: 3.0% Annual Inflation

Water Sales	<u>\$712,744</u>
Disconnect/Reconnect/Late Charge Fees	<u>\$4,800</u>
Other (Describe)	<u>          </u>
Less Allowances and Deductions	<u>          </u>
Total Operating Income .....	<u><b>\$717,544</b></u>

B. Operation and Maintenance Expenses:  
 (Based on Uniform System of Accounts prescribed by  
 National Association of Regulatory Utility Commissioners)

Source of Supply Expense	<u>\$314,746</u>
Pumping Expense	<u>\$129,114</u>
Water Treatment Expense	<u>\$0</u>
Transmission and Distribution Expense	<u>\$17,307</u>
Customer Accounts Expense	<u>\$26,865</u>
Administrative and General Expense	<u>\$59,425</u>
Total Operating Expenses .....	<u><b>\$547,457</b></u>
Net Operating Income .....	<u><b>\$170,087</b></u>

C. Non-Operating Income:

Interest on Deposits	<u>\$15,000</u>
Other (Identify)	<u>\$0</u>
Total Non-Operating Income	<u><b>\$15,000</b></u>

D. Net Income .....

**\$185,087**

E. Debt Repayment:

RD Interest	<u>          </u>
RD Principal	<u>          </u>
Non-RD Interest	<u>          </u>
Non-RD Principal	<u>          </u>
Total Debt Repayment .....	<u><b>\$116,786</b></u>

F. Balance Available for Coverage and  
 Depreciation .....

**\$68,301**

G. Required Coverage @ 20%

**\$23,357**

H. Surplus (Deficit) .....

**\$44,944**

**ECWD PHASE 6**  
**FORECAST OF WATER USAGE - INCOME - PROPOSED SYSTEM - EXISTING USERS**  
 (January 1, 1998 TO December 31, 1998)

ESTILL COUNTY WATER DISTRICT

Sep-97

Meter Size	Water Usage		Usage		Total Usage	No. of Users		Average	Average Rate	Income	
			R	C		R	C			R	C
5/8" x 3/4"	-	1,000	1,151,854	136,202	1,288,056	2,554	302	451	\$10.28	\$26,255.12	\$3,104.56
	1,000 -	2,000	8,119,792	336,160	8,455,952	5,314	220	1,528	\$10.28	\$54,627.92	\$2,261.60
	2,000 -	3,000	11,202,954	283,969	11,486,923	4,458	113	2,513	\$12.79	\$57,017.82	\$1,445.27
	3,000 -	4,000	18,305,034	255,880	18,560,914	5,233	72	3,499	\$17.60	\$92,100.80	\$1,267.20
	4,000 -	5,000	23,805,048	309,080	24,114,128	5,316	70	4,478	\$22.40	\$119,078.40	\$1,568.00
	5,000 -	6,000	14,000,640	278,919	14,279,559	2,560	51	5,469	\$27.17	\$69,555.20	\$1,385.67
	6,000 -	7,000	11,505,460	179,470	11,684,930	1,779	28	6,466	\$31.90	\$56,750.10	\$893.20
	7,000 -	8,000	8,972,080	156,786	9,128,866	1,202	21	7,464	\$36.63	\$44,029.26	\$769.23
	8,000 -	9,000	5,558,288	127,870	5,686,158	656	15	8,474	\$41.42	\$27,171.52	\$621.30
	9,000 -	10,000	3,833,336	180,728	4,014,064	403	19	9,512	\$46.34	\$18,675.02	\$880.46
	10,000 -	11,000	2,895,060	104,500	2,999,560	274	10	10,562	\$50.47	\$13,828.78	\$504.70
	11,000 -	12,000	2,280,500	115,860	2,396,360	197	10	11,576	\$53.76	\$10,590.72	\$537.60
	12,000 -	13,000	1,459,260	86,940	1,546,200	117	7	12,469	\$56.65	\$6,628.05	\$396.55
	13,000 -	14,000	1,168,480	121,440	1,289,920	86	9	13,578	\$60.24	\$5,180.64	\$542.16
	14,000 -	15,000	997,480	143,650	1,141,130	69	10	14,445	\$63.05	\$4,350.45	\$630.50
	15,000 -	16,000	928,070	78,660	1,006,730	60	5	15,488	\$66.43	\$3,985.80	\$332.15
	16,000 -	17,000	561,850	116,230	678,080	34	7	16,539	\$69.83	\$2,374.22	\$488.81
	17,000 -	18,000	420,650	70,230	490,880	24	4	17,531	\$73.05	\$1,753.20	\$292.20
	18,000 -	19,000	480,920	73,510	554,430	26	4	18,481	\$76.13	\$1,979.38	\$304.52
	19,000 -	20,000	412,870	115,970	528,840	21	6	19,587	\$79.71	\$1,673.91	\$478.26
	20,000 -	25,000	1,127,530	393,940	1,521,470	51	18	22,050	\$87.69	\$4,472.19	\$1,578.42
	25,000 -	30,000	743,460	330,820	1,074,280	27	12	27,546	\$105.50	\$2,848.50	\$1,266.00
	30,000 -	35,000	256,700	196,830	453,530	8	6	32,395	\$121.21	\$969.68	\$727.26
	35,000 -	40,000	343,386	421,050	764,436	9	11	38,222	\$140.09	\$1,260.81	\$1,540.99
40,000 -	45,000	166,320	165,980	332,300	4	4	41,538	\$150.83	\$603.32	\$603.32	
45,000 -	50,000	147,050	47,500	194,550	3	1	48,638	\$173.84	\$521.52	\$173.84	
50,000 -	55,000	408,420		408,420	8		51,053	\$181.66	\$1,453.28	\$0.00	
55,000 -	60,000	169,980		169,980	3		56,660	\$189.83	\$599.49	\$0.00	
60,000 -	65,000	184,420		184,420	3		61,473	\$215.42	\$646.26	\$0.00	
65,000 -	70,000	135,990		135,990	2		67,995	\$236.55	\$473.10	\$0.00	
70,000 -	75,000	70,620		70,620	1		70,620	\$245.06	\$245.06	\$0.00	
75,000 -	80,000	77,500	77,500	155,000	1	1	77,500	\$267.35	\$267.35	\$267.35	
80,000 -	200,000	605,470	2,879,730	3,485,200	4	18	159,985	\$534.60	\$2,138.40	\$9,622.80	
200,000 -	1,000,000		2,344,000	2,344,000	10	234,400	\$775.71		\$0.00	\$7,757.10	
<b>Subtotal</b>			<b>122,496,472</b>	<b>10,129,204</b>	<b>132,625,676</b>	<b>30,507</b>	<b>1,064</b>			<b>\$634,105.27</b>	<b>\$42,241.02</b>
<b>Average Monthly Bill</b>										<b>\$20.79</b>	<b>\$39.70</b>
<b>Average Monthly Usage</b>			<b>4,015</b>	<b>9,520</b>							

Meter Size	Water Usage		Usage		Total Usage	No. of Users		Average	Average Rate	Income	
			R	C		R	C			R	C
1"	-	1,000	1,623		1,623	3		451	\$10.28	\$30.84	\$0.00
	1,000 -	2,000		10,980	10,980	8		1,373	\$10.28	\$0.00	\$82.24
	2,000 -	3,000		6,630	6,630	3		2,210	\$11.31	\$0.00	\$33.93
	3,000 -	12,000		11,160	11,160	1		11,160	\$52.41	\$0.00	\$52.41
	12,000 -	13,000	12,250		12,250	1		12,250	\$55.94	\$55.94	\$0.00
	13,000 -	25,000	44,250		44,250	2		22,125	\$87.94	\$175.88	\$0.00
	25,000 -	30,000	55,160	25,860	81,020	2	1	27,340	\$104.83	\$209.66	\$104.83
	30,000 -	35,000	96,810	165,870	262,680	3	5	32,810	\$122.55	\$367.65	\$612.75
	35,000 -	40,000	296,140	149,364	445,504	8	4	37,125	\$136.54	\$1,092.32	\$546.16
	40,000 -	45,000	169,370	169,370	338,740	4	4	42,343	\$153.44	\$0.00	\$613.76
	45,000 -	50,000	94,110	286,320	380,430	2	6	47,554	\$170.32	\$340.64	\$1,021.92
	50,000 -	55,000	259,720	104,250	363,970	5	2	51,996	\$184.72	\$923.60	\$369.44
	55,000 -	60,000	234,640	289,330	523,970	4	5	58,219	\$204.88	\$819.52	\$1,024.40
	60,000 -	65,000	185,460	440,060	625,520	3	7	62,552	\$218.92	\$656.76	\$1,532.44
	65,000 -	70,000	133,780		133,780	2		66,890	\$232.97	\$465.94	\$0.00
	70,000 -	75,000	145,150		145,150	2		72,575	\$251.39	\$502.78	\$0.00
	75,000 -	80,000		157,020	157,020	2	2	78,510	\$270.62	\$0.00	\$541.24
	80,000 -	85,000	84,670		84,670	1		84,670	\$290.58	\$290.58	\$0.00
	85,000 -	90,000	344,550		344,550	4		86,138	\$295.34	\$1,181.36	\$0.00
	90,000 -	100,000	96,300		96,300	1		96,300	\$328.26	\$328.26	\$0.00
100,000 -	200,000	254,340		254,340	2		127,170	\$428.28	\$856.56	\$0.00	
<b>Subtotal</b>			<b>2,338,953</b>	<b>1,816,014</b>	<b>4,154,967</b>	<b>45</b>	<b>48</b>			<b>\$8,298.29</b>	<b>\$6,535.52</b>
<b>Average Monthly Bill</b>										<b>\$184.41</b>	<b>\$136.16</b>
<b>Average Monthly Usage</b>			<b>51,977</b>	<b>37,834</b>							

**ECWD PHASE 6  
FORECAST OF WATER USAGE - INCOME - PROPOSED SYSTEM - EXISTING USERS  
(January 1, 1998 TO December 31, 1998)**

ESTILL COUNTY WATER DISTRICT

Sep-97

Meter Size	Water Usage		Total Usage		Total Usage		No. of Users		Average		Income	
			R	C			R	C	Average	Rate	R	C
2"	-	1,000	4,570		4,570		9		508	\$10.28	\$92.52	\$0.00
	1,000 -	2,000	4,500		4,500		3		1,500	\$10.28	\$30.84	\$0.00
	2,000 -	3,000	2,500		2,500		1		2,500	\$12.73	\$12.73	\$0.00
	3,000 -	4,000	10,300	3,800	14,100		3	1	3,525	\$17.74	\$53.22	\$17.74
	4,000 -	5,000	9,200	9,900	19,100		2	2	4,775	\$23.85	\$47.70	\$47.70
	5,000 -	6,000	38,200	10,400	48,600		7	2	5,400	\$26.85	\$187.95	\$53.70
	6,000 -	7,000	32,390	25,912	58,302		5	4	6,478	\$31.96	\$159.80	\$127.84
	7,000 -	8,000	30,500	37,800	68,100		4	5	7,567	\$37.12	\$148.48	\$185.60
	8,000 -	9,000	17,000	16,900	33,900		2	2	8,475	\$41.42	\$82.84	\$82.84
	9,000 -	10,000		9,400	9,400		1	1	9,400	\$45.81	\$0.00	\$45.81
	10,000 -	12,000	22,700	23,700	46,400		2	2	11,600	\$53.83	\$107.66	\$107.66
	12,000 -	13,000		12,400	12,400		1	1	12,400	\$56.43	\$0.00	\$56.43
	13,000 -	14,000	13,650	13,650	27,300		1	1	13,650	\$60.48	\$60.48	\$60.48
	14,000 -	15,000	14,500		14,500		1	1	14,500	\$63.23	\$63.23	\$0.00
	15,000 -	16,000		16,000	16,000		1	1	16,000	\$68.09	\$0.00	\$68.09
	16,000 -	17,000		16,900	16,900		1	1	16,900	\$71.01	\$0.00	\$71.01
	17,000 -	18,000	34,500		34,500		2		17,250	\$72.14	\$144.28	\$0.00
	18,000 -	19,000	38,600	18,800	55,400		2	1	18,467	\$76.08	\$152.16	\$76.08
	19,000 -	25,000	115,530	162,600	278,130		5	7	23,178	\$91.35	\$456.75	\$639.45
	25,000 -	30,000	54,800	195,500	250,300		2	7	27,811	\$106.36	\$212.72	\$744.52
30,000 -	35,000		422,800	422,800		13		32,523	\$121.62	\$0.00	\$1,581.06	
35,000 -	40,000	38,227	229,542	267,769		1	6	38,253	\$140.19	\$140.19	\$841.14	
40,000 -	45,000		253,680	253,680		6		42,280	\$153.24	\$0.00	\$919.44	
45,000 -	50,000	140,200	140,100	280,300		3	3	46,717	\$167.61	\$502.83	\$502.83	
50,000 -	55,000		154,500	154,500		3		51,500	\$183.11	\$0.00	\$549.33	
55,000 -	65,000		69,800	69,800		1		69,800	\$242.40	\$0.00	\$242.40	
70,000 -	75,000		70,600	70,600		1		70,600	\$244.99	\$0.00	\$244.99	
75,000 -	200,000	418,300	1,394,330	1,812,630		3	10	139,433	\$468.01	\$1,404.03	\$4,680.10	
200,000 -	1,000,000	429,800	1,074,500	1,504,300		2	5	214,900	\$712.53	\$1,425.06	\$3,562.65	
<b>Subtotal</b>			<b>1,467,967</b>	<b>4,446,314</b>	<b>5,914,281</b>	<b>60</b>	<b>87</b>			<b>\$5,485.47</b>	<b>\$15,729.26</b>	
<b>Average Monthly Bill</b>										<b>\$91.42</b>	<b>\$180.80</b>	
<b>Average Monthly Usage</b>			<b>24,466</b>	<b>51,107</b>								

Meter Size	Water Usage		Total Usage		Total Usage		No. of Users		Average		Income	
			R	C			R	C	Average	Rate	R	C
3" Powell Valley	-	40000								\$10.28	\$0.00	\$0.00
	40000 -	200000		237000	237,000		1		237,000	\$350.00	\$0.00	\$350.00
	200000 -	1000000			0						\$0.00	\$0.00
<b>Subtotal</b>			<b>0</b>	<b>237,000</b>	<b>237,000</b>	<b>0</b>	<b>1</b>			<b>\$0.00</b>	<b>\$350.00</b>	
<b>Average Monthly Bill</b>										<b>\$0.00</b>	<b>\$350.00</b>	
<b>Average Monthly Usage</b>			<b>0</b>	<b>237,000</b>								

	Total Usage		Total Usage		No. of Users		Average		Income	
	R	C			R	C	Average	Rate	R	C
<b>Subtotals</b>	<b>126,303,392</b>	<b>16,628,532</b>	<b>142,931,924</b>		<b>30,612</b>	<b>1,200</b>			<b>\$647,889.03</b>	<b>\$64,855.80</b>
<b>TOTALS</b>			<b>142,931,924</b>			<b>31,812</b>				<b>\$712,744.83</b>

XXX.

**ECWD PHASE 6**  
**FORECAST OF WATER USAGE - INCOME - PROPOSED SYSTEM - NEW USERS**  
 January 1, 1998 to December 31, 1998 (PH 6 ORIGINAL)

ESTILL COUNTY WATER DISTRICT

Sep-97

Meter Size	Water Usage		Usage		Total Usage	No. of Users		Average	Average Rate		Income	
	R	C	R	C		R	C		R	C		
5/8" x 3/4"	-	1,000	0	0	0	0	0	500	\$10.28	\$0.00	\$0.00	
	1,000	2,000	0	0	0	0	0	1,500	\$10.28	\$0.00	\$0.00	
	2,000	3,000	0	0	0	0	0	2,500	\$12.73	\$0.00	\$0.00	
	3,000	4,000	0	0	0	0	0	3,500	\$17.62	\$0.00	\$0.00	
	4,000	5,000	6,005,256	0	6,005,256	1,416 *	0	4,241	\$21.24	\$30,075.84	\$0.00	
	5,000	6,000	0	0	0	0	0	5,500	\$27.32	\$0.00	\$0.00	
	6,000	7,000	0	0	0	0	0	6,500	\$32.06	\$0.00	\$0.00	
	7,000	8,000	0	0	0	0	0	7,500	\$36.80	\$0.00	\$0.00	
	8,000	9,000	0	0	0	0	0	8,500	\$41.54	\$0.00	\$0.00	
	9,000	10,000	0	0	0	0	0	9,500	\$46.28	\$0.00	\$0.00	
	10,000	11,000	0	0	0	0	0	10,500	\$50.27	\$0.00	\$0.00	
	11,000	12,000	0	0	0	0	0	11,500	\$53.51	\$0.00	\$0.00	
	12,000	13,000	0	0	0	0	0	12,500	\$56.75	\$0.00	\$0.00	
	13,000	14,000	0	0	0	0	0	13,500	\$59.99	\$0.00	\$0.00	
	14,000	15,000	0	0	0	0	0	14,500	\$63.23	\$0.00	\$0.00	
	15,000	16,000	0	0	0	0	0	15,500	\$66.47	\$0.00	\$0.00	
	16,000	17,000	0	0	0	0	0	16,500	\$69.71	\$0.00	\$0.00	
	17,000	18,000	0	0	0	0	0	17,500	\$72.95	\$0.00	\$0.00	
	18,000	19,000	0	0	0	0	0	18,500	\$76.19	\$0.00	\$0.00	
	19,000	20,000	0	0	0	0	0	19,500	\$79.43	\$0.00	\$0.00	
	20,000	25,000	0	0	0	0	0	22,500	\$89.15	\$0.00	\$0.00	
	25,000	30,000	0	0	0	0	0	27,500	\$105.35	\$0.00	\$0.00	
	30,000	35,000	0	0	0	0	0	32,500	\$121.55	\$0.00	\$0.00	
	35,000	40,000	0	0	0	0	0	37,500	\$137.75	\$0.00	\$0.00	
	40,000	45,000	0	0	0	0	0	42,500	\$153.95	\$0.00	\$0.00	
	45,000	50,000	0	0	0	0	0	47,500	\$170.15	\$0.00	\$0.00	
	50,000	55,000	0	0	0	0	0	52,500	\$186.35	\$0.00	\$0.00	
	55,000	60,000	0	0	0	0	0	57,500	\$202.55	\$0.00	\$0.00	
	60,000	65,000	0	0	0	0	0	62,500	\$218.75	\$0.00	\$0.00	
	65,000	70,000	0	0	0	0	0	67,500	\$234.95	\$0.00	\$0.00	
	70,000	75,000	0	0	0	0	0	72,500	\$251.15	\$0.00	\$0.00	
	75,000	80,000	0	0	0	0	0	77,500	\$267.35	\$0.00	\$0.00	
	80,000	200,000	0	0	0	0	0	140,000	\$469.85	\$0.00	\$0.00	
	200,000	1,000,000	0	0	0	0	0	600,000	\$1,960.25	\$0.00	\$0.00	
<b>Subtotal</b>			<b>6,005,256</b>	<b>0</b>	<b>6,005,256</b>	<b>1,416</b>	<b>0</b>			<b>\$30,075.84</b>	<b>\$0.00</b>	
<b>Average Monthly Bill</b>										<b>\$21.24</b>	<b>\$0.00</b>	
<b>Average Monthly Usage</b>			<b>4,241</b>	<b>0</b>								

\* Number of users based upon 80% of potential customers actually tapping into the new water line.

# Funding Option 1

XXIX. PROPOSED OPERATING BUDGET - PROPOSED WATER SYSTEM - NEW USERS		Year Ending	1998
(1st Full Year of Operation)			
A. Operating Income:	3.0% Annual Inflation 5.0% RD Loan		\$1,372,767
	Water Sales		\$30,076
	Disconnect/Reconnect/Late Charge Fees		
	Other (Describe)		
	Less Allowances and Deductions		
	Total Operating Income .....		<u>\$30,076</u>
B. Operation and Maintenance Expenses:	(Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)		
	Source of Supply Expense		\$14,913
	Pumping Expense		\$5,767
	Water Treatment Expense		\$0
	Transmission and Distribution Expense		\$773
	Customer Accounts Expense		\$1,200
	Administrative and General Expense		\$2,654
	Total Operating Expenses .....		<u>\$25,307</u>
	Net Operating Income .....		<u>\$4,769</u>
C. Non-Operating Income:			
	Interest on Deposits		
	Other (Identify)		\$0
	Total Non-Operating Income		<u>\$0</u>
D. Net Income .....			<u>\$4,769</u>
E. Debt Repayment:			
	RD Interest		
	RD Principal		
	Non-RD Interest		
	Non-RD Principal		
	Total Debt Repayment .....		<u>\$81,383</u>
F. Balance Available for Coverage and Depreciation .....			<u>-\$76,614</u>
G. Required Coverage @ 20%			<u>\$16,277</u>
H. Surplus (Deficit) .....			<u>-\$92,891</u>

**ECWD PHASE 6**  
**FORECAST OF WATER USAGE - INCOME - PROPOSED SYSTEM - NEW USERS**  
 January 1, 1998 to December 31, 1998 (COBHILL AREA)

ESTILL COUNTY WATER DISTRICT

Sep-97

Meter Size	Water Usage		Usage		Total Usage	No. of Users		Average	Average Rate	Income	
	R	C	R	C		R	C			R	C
5/8" x 3/4"	-	1,000	0	0	0	0	0	500	\$10.28	\$0.00	\$0.00
	1,000 -	2,000	0	0	0	0	0	1,500	\$10.28	\$0.00	\$0.00
	2,000 -	3,000	0	0	0	0	0	2,500	\$12.73	\$0.00	\$0.00
	3,000 -	4,000	0	0	0	0	0	3,500	\$17.62	\$0.00	\$0.00
	4,000 -	5,000	8,396,280	0	8,396,280	1,992 *	0	4,215	\$21.11	\$42,051.12	\$0.00
	5,000 -	6,000	0	0	0	0	0	5,500	\$27.32	\$0.00	\$0.00
	6,000 -	7,000	0	0	0	0	0	6,500	\$32.06	\$0.00	\$0.00
	7,000 -	8,000	0	0	0	0	0	7,500	\$36.80	\$0.00	\$0.00
	8,000 -	9,000	0	0	0	0	0	8,500	\$41.54	\$0.00	\$0.00
	9,000 -	10,000	0	0	0	0	0	9,500	\$46.28	\$0.00	\$0.00
	10,000 -	11,000	0	0	0	0	0	10,500	\$50.27	\$0.00	\$0.00
	11,000 -	12,000	0	0	0	0	0	11,500	\$53.51	\$0.00	\$0.00
	12,000 -	13,000	0	0	0	0	0	12,500	\$56.75	\$0.00	\$0.00
	13,000 -	14,000	0	0	0	0	0	13,500	\$59.99	\$0.00	\$0.00
	14,000 -	15,000	0	0	0	0	0	14,500	\$63.23	\$0.00	\$0.00
	15,000 -	16,000	0	0	0	0	0	15,500	\$66.47	\$0.00	\$0.00
	16,000 -	17,000	0	0	0	0	0	16,500	\$69.71	\$0.00	\$0.00
	17,000 -	18,000	0	0	0	0	0	17,500	\$72.95	\$0.00	\$0.00
	18,000 -	19,000	0	0	0	0	0	18,500	\$76.19	\$0.00	\$0.00
	19,000 -	20,000	0	0	0	0	0	19,500	\$79.43	\$0.00	\$0.00
	20,000 -	25,000	0	0	0	0	0	22,500	\$89.15	\$0.00	\$0.00
	25,000 -	30,000	0	0	0	0	0	27,500	\$105.35	\$0.00	\$0.00
	30,000 -	35,000	0	0	0	0	0	32,500	\$121.55	\$0.00	\$0.00
	35,000 -	40,000	0	0	0	0	0	37,500	\$137.75	\$0.00	\$0.00
	40,000 -	45,000	0	0	0	0	0	42,500	\$153.95	\$0.00	\$0.00
	45,000 -	50,000	0	0	0	0	0	47,500	\$170.15	\$0.00	\$0.00
	50,000 -	55,000	0	0	0	0	0	52,500	\$186.35	\$0.00	\$0.00
	55,000 -	60,000	0	0	0	0	0	57,500	\$202.55	\$0.00	\$0.00
	60,000 -	65,000	0	0	0	0	0	62,500	\$218.75	\$0.00	\$0.00
	65,000 -	70,000	0	0	0	0	0	67,500	\$234.95	\$0.00	\$0.00
	70,000 -	75,000	0	0	0	0	0	72,500	\$251.15	\$0.00	\$0.00
	75,000 -	80,000	0	0	0	0	0	77,500	\$267.35	\$0.00	\$0.00
	80,000 -	200,000	0	0	0	0	0	140,000	\$469.85	\$0.00	\$0.00
	200,000 -	*****	0	0	0	0	0	600,000	*****	\$0.00	\$0.00
<b>Subtotal</b>			<b>8,396,280</b>	<b>0</b>	<b>8,396,280</b>	<b>1,992</b>	<b>0</b>			<b>\$42,051.12</b>	<b>\$0.00</b>
<b>Average Monthly Bill</b>										<b>\$21.11</b>	<b>\$0.00</b>
<b>Average Monthly Usage</b>			<b>4,215</b>	<b>0</b>							

\* Number of users based upon 80% of potential customers actually tapping into the new water line.

# Funding Option 2

XXXIII PROPOSED OPERATING BUDGET - PROPOSED WATER SYSTEM - NEW USERS		Year Ending	1998
(1st Full Year of Operation)			
A. Operating Income:    3.0% Annual Inflation			
	5.0% RD Loan		\$951,850
	CDBG		\$985,000
Water Sales			\$42,051
Disconnect/Reconnect/Late Charge Fees			
Other (Describe)			
Less Allowances and Deductions			
Total Operating Income			<u>\$42,051</u>
B. Operation and Maintenance Expenses:			
(Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)			
Source of Supply Expense			\$20,859
Pumping Expense			\$8,065
Water Treatment Expense			\$0
Transmission and Distribution Expense			\$1,081
Customer Accounts Expense			\$1,678
Administrative and General Expense			\$3,712
Total Operating Expenses			<u>\$35,395</u>
Net Operating Income			<u>\$6,656</u>
C. Non-Operating Income:			
Interest on Deposits			
Other (Identify)			\$0
Total Non-Operating Income			<u>\$0</u>
D. Net Income			<u>\$6,656</u>
E. Debt Repayment:			
RD Interest			
RD Principal			
Non-RD Interest			
Non-RD Principal			
Total Debt Repayment			<u>\$56,430</u>
F. Balance Available for Coverage and Depreciation			<u>-\$49,774</u>
G. Required Coverage @ 20%			<u>\$11,286</u>
H. Surplus (Deficit)			<u>-\$61,060</u>

# Funding Option 3

## XXXIV PROPOSED OPERATING BUDGET - PROPOSED WATER SYSTEM - NEW USERS

(1st Full Year of Operation)

Year Ending 1998

A. Operating Income:	3.0% Annual Inflation	
	5.0% RD Loan	\$686,383
	RD Grant 50%	\$686,384
Water Sales		\$30,076
Disconnect/Reconnect/Late Charge Fees		
Other (Describe)		
Less Allowances and Deductions		
Total Operating Income		<u>\$30,076</u>
B. Operation and Maintenance Expenses:		
(Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)		
Source of Supply Expense		\$14,913
Pumping Expense		\$5,767
Water Treatment Expense		\$0
Transmission and Distribution Expense		\$773
Customer Accounts Expense		\$1,200
Administrative and General Expense		\$2,654
Total Operating Expenses		<u>\$25,307</u>
Net Operating Income		<u>\$4,769</u>
C. Non-Operating Income:		
Interest on Deposits		
Other (Identify)		\$0
Total Non-Operating Income		<u>\$0</u>
D. Net Income		<u>\$4,769</u>
E. Debt Repayment:		
RD Interest		
RD Principal		
Non-RD Interest		
Non-RD Principal		
Total Debt Repayment		<u>\$40,692</u>
F. Balance Available for Coverage and Depreciation		<u>-\$35,923</u>
G. Required Coverage @ 20%		<u>\$8,138</u>
H. Surplus (Deficit)		<u>-\$44,061</u>

# Funding Option 3 & 4

XXXV. PROPOSED OPERATING BUDGET - PROPOSED WATER SYSTEM - NEW USERS		Year Ending	1998
(1st Full Year of Operation)			
A. Operating Income: 3.0% Annual Inflation			
	5.0% RD Loan	\$475,925	
	CDBG (\$985,000) & RD Grant 50%	\$1,460,925	
Water Sales			\$42,051
Disconnect/Reconnect/Late Charge Fees			
Other (Describe)			
Less Allowances and Deductions			
Total Operating Income			<u>\$42,051</u>
B. Operation and Maintenance Expenses: (Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)			
Source of Supply Expense		\$20,859	
Pumping Expense		\$8,065	
Water Treatment Expense		\$0	
Transmission and Distribution Expense		\$1,081	
Customer Accounts Expense		\$1,678	
Administrative and General Expense		\$3,712	
Total Operating Expenses			<u>\$35,395</u>
Net Operating Income			<u>\$6,656</u>
C. Non-Operating Income:			
Interest on Deposits			
Other (Identify)			\$0
Total Non-Operating Income			<u>\$0</u>
D. Net Income			<u>\$6,656</u>
E. Debt Repayment:			
RD Interest			
RD Principal			
Non-RD Interest			
Non-RD Principal			
Total Debt Repayment			<u>\$28,215</u>
F. Balance Available for Coverage and Depreciation			<u>-\$21,559</u>
G. Required Coverage @ 20%			<u>\$5,643</u>
H. Surplus (Deficit)			<u>-\$27,202</u>

# Funding Option 4

XXXVI PROPOSED OPERATING BUDGET - PROPOSED WATER SYSTEM - NEW USERS		Year Ending	1998
(1st Full Year of Operation)			
A. Operating Income:	3.0% Annual Inflation		
	5.0% RD Loan	\$461,383	
	ARC (\$450,000) & RD Grant 50%	\$911,384	
	Water Sales		\$30,076
	Disconnect/Reconnect/Late Charge Fees		
	Other (Describe)		
	Less Allowances and Deductions		
	Total Operating Income .....		<u>\$30,076</u>
B. Operation and Maintenance Expenses:			
	(Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)		
	Source of Supply Expense		\$14,913
	Pumping Expense		\$5,767
	Water Treatment Expense		\$0
	Transmission and Distribution Expense		\$773
	Customer Accounts Expense		\$1,200
	Administrative and General Expense		\$2,654
	Total Operating Expenses .....		<u>\$25,307</u>
	Net Operating Income .....		<u>\$4,769</u>
C. Non-Operating Income:			
	Interest on Deposits		
	Other (Identify)		\$0
	Total Non-Operating Income		<u>\$0</u>
D. Net Income .....			<u>\$4,769</u>
E. Debt Repayment:			
	RD Interest		
	RD Principal		
	Non-RD Interest		
	Non-RD Principal		
	Total Debt Repayment .....		<u>\$27,353</u>
F. Balance Available for Coverage and Depreciation .....			<u>-\$22,584</u>
G. Required Coverage @ 20%			<u>\$5,471</u>
H. Surplus (Deficit) .....			<u>-\$28,054</u>

# Funding Option 5

## XXXVII PROPOSED OPERATING BUDGET - PROPOSED WATER SYSTEM - NEW USERS

(1st Full Year of Operation)

Year Ending 1998

A. Operating Income:	3.0% Annual Inflation	
	5.0% RD Loan	\$230,691
	ARC (\$450,000) & RD Grant 75%	\$1,142,076
Water Sales		\$30,076
Disconnect/Reconnect/Late Charge Fees		
Other (Describe)		
	Less Allowances and Deductions	
Total Operating Income		<u>\$30,076</u>
B. Operation and Maintenance Expenses:		
	(Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)	
Source of Supply Expense		\$14,913
Pumping Expense		\$5,767
Water Treatment Expense		\$0
Transmission and Distribution Expense		\$773
Customer Accounts Expense		\$1,200
Administrative and General Expense		\$2,654
Total Operating Expenses		<u>\$25,307</u>
Net Operating Income		<u>\$4,769</u>
C. Non-Operating Income:		
Interest on Deposits		
Other (Identify)		\$0
Total Non-Operating Income		<u>\$0</u>
D. Net Income		<u>\$4,769</u>
E. Debt Repayment:		
RD Interest		
RD Principal		
Non-RD Interest		
Non-RD Principal		
Total Debt Repayment		<u>\$13,676</u>
F. Balance Available for Coverage and Depreciation		<u>-\$8,907</u>
G. Required Coverage @ 20%		<u>\$2,735</u>
H. Surplus (Deficit)		<u>-\$11,642</u>

# Funding Option 5

XXXVIII. PROPOSED OPERATING BUDGET - PROPOSED WATER SYSTEM - NEW USERS		Year Ending	1998
(1st Full Year of Operation)			
A. Operating Income:	3.0% Annual Inflation		
	5.0% RD Loan	\$237,962	
	CDBG (\$985,000) & RD Grant 75%	\$1,698,888	
Water Sales			\$42,051
Disconnect/Reconnect/Late Charge Fees			
Other (Describe)			
Less Allowances and Deductions			
Total Operating Income .....			<u>\$42,051</u>
B. Operation and Maintenance Expenses:			
(Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)			
Source of Supply Expense			\$20,859
Pumping Expense			\$8,065
Water Treatment Expense			\$0
Transmission and Distribution Expense			\$1,081
Customer Accounts Expense			\$1,678
Administrative and General Expense			\$3,712
Total Operating Expenses .....			<u>\$35,395</u>
Net Operating Income .....			<u>\$6,656</u>
C. Non-Operating Income:			
Interest on Deposits			
Other (Identify)			\$0
Total Non-Operating Income			<u>\$0</u>
D. Net Income .....			<u>\$6,656</u>
E. Debt Repayment:			
RD Interest			
RD Principal			
Non-RD Interest			
Non-RD Principal			
Total Debt Repayment .....			<u>\$14,107</u>
F. Balance Available for Coverage and Depreciation .....			<u>-\$7,452</u>
G. Required Coverage @ 20%			<u>\$2,821</u>
H. Surplus (Deficit) .....			<u>-\$10,273</u>

XXXILX. ESTIMATED PROJECT COST- SEWER SYSTEM

(Round to nearest \$100)

	COLLECTION		TREATMENT		Total
	EPA Eligible	Non-EPA Eligible	EPA Eligible	Non-EPA Eligible	
Development	\$	\$	\$	\$	\$
Land and Rights					
Legal					
Engineering					
Interest					
Contingencies					
Initial O&M					
Other					
<b>TOTAL</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>

XL. PROPOSED PROJECT FUNDING- SEWER

(Round to nearest \$100)

Applicant - User Connection Fees	\$	\$	\$	\$	\$
Other Applicant Contribution					
RD Financial Assistance					
Other (Specify)					
Other (Specify)					
Other (Specify)					
Other (Specify)					
<b>TOTAL</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>

**XLIII. ESTIMATED PROJECT COST - WATER**

Development:		
Cohill		<u>1,445,730</u>
Ph 6 Original		<u>1,227,082</u>
Subtotal	\$	<u>2,672,812</u>
Land and Rights		<u>30,000</u>
Administrative and Legal		<u>72,000</u>
Engineering		<u>189,770</u>
Resident Inspection		<u>88,203</u>
Additional Engineering		<u>50,000</u>
Miscellaneous		<u>70,000</u>
Contingencies		<u>226,032</u>
Total	\$	<u>3,398,817</u>

**XLII. ESTIMATED PROJECT FUNDING - WATER**

A summary of the proposed funding is as follows:

<u>FUNDING OPTION 1</u>		<u>Cobhill Area</u>	<u>Ph 6 Original</u>	<u>Total</u>
RD Grant	0%	\$0	\$0	\$0
RD Loan	100%	\$1,902,900	\$1,372,767	\$3,275,667
CDBG		\$0	\$0	\$0
ARC		\$0	\$0	\$0
Tap Fees	@ \$350	\$59,850	\$41,300	\$101,150
Local Contribution		\$12,000	\$10,000	\$22,000
	<b>Subtotals</b>	<b>\$1,974,750</b>	<b>\$1,424,067</b>	<b>\$3,398,817</b>

<u>FUNDING OPTION 2</u>		<u>Cobhill Area</u>	<u>Ph 6 Original</u>	<u>Total</u>
RD Grant	0%	\$0	\$0	\$0
RD Loan	100%	\$951,850	\$1,372,767	\$2,324,617
CDBG		\$985,000	\$0	\$985,000
ARC		\$0	\$0	\$0
Tap Fees	@ \$350	\$25,900	\$41,300	\$67,200
Local Contribution		\$12,000	\$10,000	\$22,000
	<b>Subtotals</b>	<b>\$1,974,750</b>	<b>\$1,424,067</b>	<b>\$3,398,817</b>

**FUNDING**  
**OPTION 3**

		<u>Cobhill</u>	<u>Ph 6</u>	<u>Total</u>
		<u>Area</u>	<u>Original</u>	
RD Grant	50%	\$475,925	\$686,384	\$1,162,309
RD Loan	50%	\$475,925	\$686,383	\$1,162,308
CDBG		\$985,000	\$0	\$985,000
ARC		\$0	\$0	\$0
Tap Fees	@ \$350	\$25,900	\$41,300	\$67,200
Local Contribution		\$10,000	\$10,000	\$20,000
<b>Subtotals</b>		<b>\$1,974,750</b>	<b>\$1,424,067</b>	<b>\$3,398,817</b>

**FUNDING**  
**OPTION 4**

		<u>Cobhill</u>	<u>Ph 6</u>	<u>Total</u>
		<u>Area</u>	<u>Original</u>	
RD Grant	50%	\$475,925	\$461,384	\$937,309
RD Loan	50%	\$475,925	\$461,383	\$937,308
CDBG		\$985,000	\$0	\$985,000
ARC		\$0	\$450,000	\$450,000
Tap Fees	@ \$350	\$25,900	\$41,300	\$67,200
Local Contribution		\$12,000	\$10,000	\$22,000
<b>Subtotals</b>		<b>\$1,974,750</b>	<b>\$1,424,067</b>	<b>\$3,398,817</b>

Recommended Funding

**FUNDING**  
**OPTION 5**

		<u>Cobhill</u>	<u>Ph 6</u>	<u>Total</u>
		<u>Area</u>	<u>Original</u>	
RD Grant	75%	\$713,888	\$692,076	\$1,405,963
RD Loan	25%	\$237,962	\$230,691	\$468,654
CDBG		\$985,000	\$0	\$985,000
ARC		\$0	\$450,000	\$450,000
Tap Fees	@ \$350	\$25,900	\$41,300	\$67,200
Local Contribution		\$12,000	\$10,000	\$22,000
<b>Subtotals</b>		<b>\$1,974,750</b>	<b>\$1,424,067</b>	<b>\$3,398,817</b>

**FIGURES**

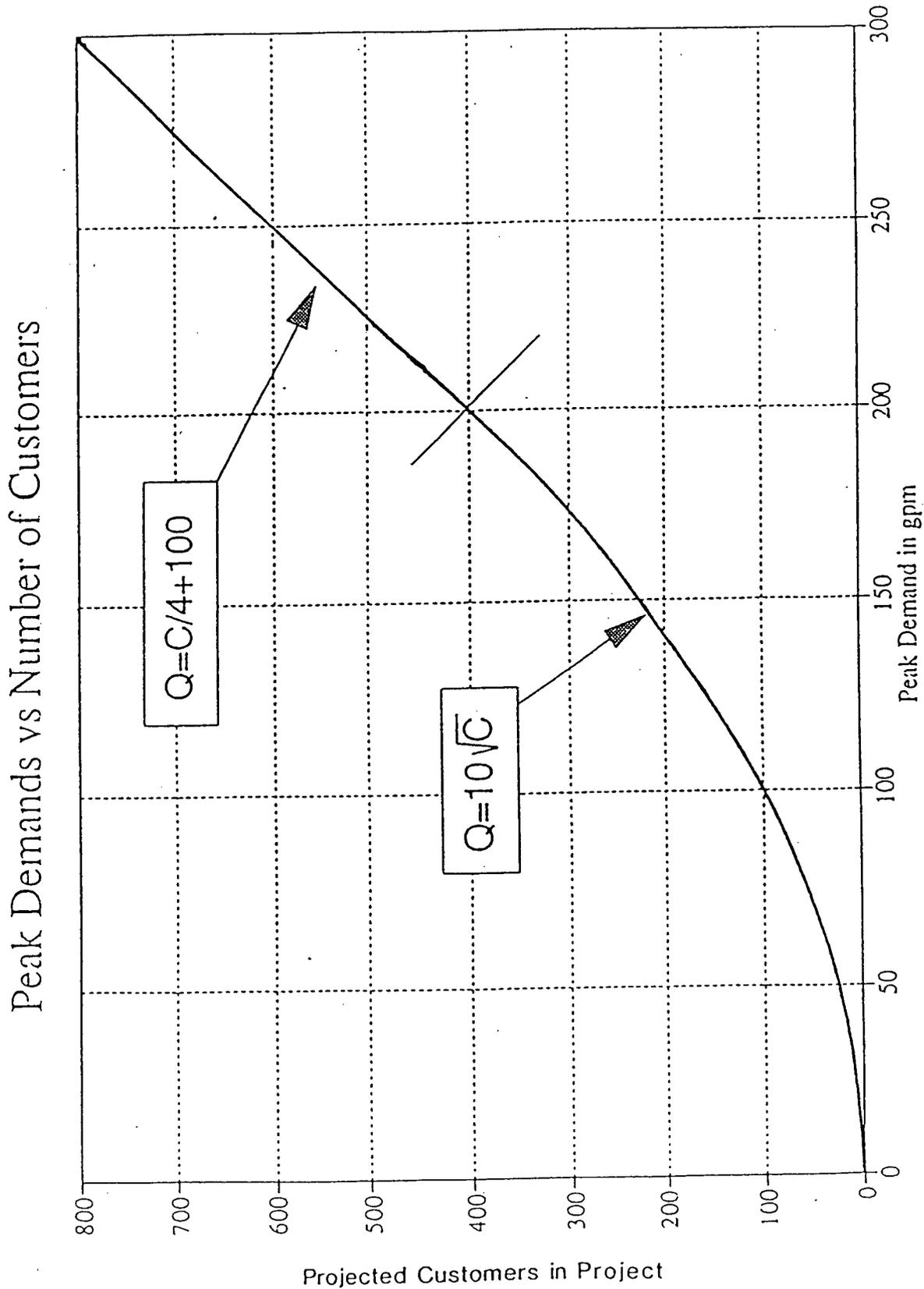


Figure No. 1

TABLES

TABLE 1 a

ESTILL COUNTY WATER DISTRICT  
ECWD- PHASE 6 ORIGINAL PROJECT

ESTIMATED PROJECT COSTS:

NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>WATER LINE CONSTRUCTION</b>					
1	8" Ductile Iron River Crossing Pipe	500	L.F.	\$150.00	\$75,000.00
2	8" PVC Pipe	950	L.F.	\$14.00	\$13,300.00
3	6" PVC Pipe	22,400	L.F.	\$6.40	\$143,360.00
4	4" PVC Pipe	57,124	L.F.	\$5.70	\$325,606.80
5	3" PVC Pipe	15,800	L.F.	\$4.60	\$72,680.00
6	Valves	60	EA.	\$380.00	\$22,800.00
7	Road Bore	800	L.F.	\$50.00	\$40,000.00
8	Customer Services	148	EA.	\$430.00	\$63,640.00
9	Reconnect Services	20	EA.	\$500.00	\$10,000.00
10	Service Line	7,400	L.F.	\$3.00	\$22,200.00
11	Blowoffs	40	EA.	\$1,200.00	\$48,000.00
12	Stream Crossing	950	L.F.	\$30.00	\$28,500.00
13	Pavement Repair	3,340	L.F.	\$20.00	\$66,800.00
14	Driveway Repair	1,340	EA.	\$5.00	\$6,700.00
15	Tie- ins	30	L.F.	\$1,210.00	\$36,300.00
Subtotal Water Line Construction:					\$974,886.80
<b>PUMP STATION CONSTRUCTION</b>					
16	Pump Station Renovation	1	LS	\$60,000.00	\$60,000.00
<b>RADIO TELEMETRY</b>					
17	Telemetry	1	LS	\$192,200.00	\$192,200.00
TOTAL CONSTRUCTION COSTS:					\$1,227,086.80

TABLE 1 b

ESTILL COUNTY WATER DISTRICT  
ECWD- COBHILL PROJECT PROJECT

ESTIMATED PROJECT COSTS:

NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>WATER LINE CONSTRUCTION</b>					
1	6" Ductile Iron River Crossing Pipe	330	L.F.	\$100.00	\$33,000.00
2	6" PVC Pipe	73,200	L.F.	\$6.40	\$468,480.00
3	4" PVC Pipe	51,500	L.F.	\$5.70	\$293,550.00
4	3" PVC Pipe	19,200	L.F.	\$4.60	\$88,320.00
5	Valves	40	EA.	\$380.00	\$15,200.00
6	Road Bore	400	L.F.	\$50.00	\$20,000.00
7	Customer Services	207	EA.	\$430.00	\$89,010.00
8	Service Line	11,000	L.F.	\$3.00	\$33,000.00
9	Blowoffs	12	EA.	\$1,200.00	\$14,400.00
10	Stream Crossing	250	L.F.	\$30.00	\$7,500.00
11	Pavement Repair	1,230	L.F.	\$20.00	\$24,600.00
12	Driveway Repair	1,250	EA.	\$5.00	\$6,250.00
13	Tie- ins	2	L.F.	\$1,210.00	\$2,420.00
Subtotal Water Line Construction:					\$1,095,730.00
<b>WATER TANK CONSTRUCTION</b>					
14	80,000 Gallon Storage Tank	1	LS	\$115,000.00	\$115,000.00
15	80,000 Gallon Storage Tank	1	LS	\$115,000.00	\$115,000.00
Subtotal Water Tank Construction:					\$230,000.00
<b>PUMP STATION CONSTRUCTION</b>					
16	200 GPM Pump Station	1	LS	\$65,000.00	\$65,000.00
17	100 GPM Pump Station	1	LS	\$55,000.00	\$55,000.00
Subtotal Pump Station Construction:					\$120,000.00
TOTAL CONSTRUCTION COSTS:					\$1,445,730.00

TABLE 2

	TOTAL COSTS
Construction :	
Cobhill Area	\$1,445,730
Ph 6 Original	1,227,082
<b>SUBTOTAL:</b>	<b>\$2,672,812</b>
Basic Engineering	189,770
Resident Inspection	88,203
Preliminary Engineering	20,000
Geo-Tech/Survey	20,000
Additional Engineering	50,000
Acquisition	30,000
Interest	25,000
Legal Service	20,000
Administration	52,000
Planning	5,000
Contingencies	226,032
<b>TOTAL PROJECT COSTS:</b>	<b>\$3,398,817</b>

EXHIBITS